THE CULTIVATOR.

NEW "TO IMPROVE THE SOIL AND THE MIND." SERIES.

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THE CULTIVATOR

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Foreign Correspondence.

MR. NORTON'S LETTERS—No. XVII.

Laboratory of Ag. Chemistry Association,
8 Bank-st., Edinburgh, Aug. 20, 1845.

L. TUCKER, Esq.—I have just been reading the proof sheets of an article of Prof. Johnston's, and think I can scarcely give you anything more interesting or useful, than some extracts from it, which Prof. Johnston has kindly permitted me to make.

He first speaks of the great bulk of the potatoe crop, which by the cost of its transport, prevents the farmer who has no near market, from growing it over a large extent of ground. It is therefore of much consequence if he can convert the potato into some more portable articles, which will at the same time meet with a ready sale. One of these articles is farina, or potato flour.

"Into this manufacture," says Prof. Johnston, "great improvements have recently been introduced, and the farina is converted into British *Tapioca*, into syrup, and other articles, which find a more or less ready market. The waste fibre of the potato, which formerly was considered fit only for manure, is now converted into a wholesome nourishment for cattle, and even the washings of the starch, where skill and economy preside over the process, are collected and employed as a manure. Mr. Binning Home mentions that these washings, when allowed to run into the potato drills, had given, near Stirling, a larger crop of potatoes than was yielded by other parts of the same field to which guano and farm-yard dung had been applied. The farina, or starch, has hitherto commanded a ready sale in the Liverpool market; and such was the success of a manufactory established in 1843, on the Bay of Wigton, that in 1844 several others were in process of erection, so that the outlet of the potatoe crop in that locality was greatly increased. The principal buyers of the potatoe starch have been the calico printers, and others engaged in the cotton manufactures."

Potato farina or flour has been laboring under a prejudice against its use, and the mixing of it with wheat flour practiced by some bakers, has been considered an adulteration.

"In Germany a method has lately been introduced of making flour from potatoes, which has not, I believe, been tried in this country, but which is recommended as giving a better, a more palatable, and a more abundant article of nourishment than the common process of preparing potatoe starch. This method consists in washing the potatoes, cutting them into slices, as we do turneps, steeping these slices for twenty-four hours in water containing one per cent of sulphuric acid, (oil of vitriol,) drawing off the acid water, washing them several times with pure water, drying them in a stove or oven, and then grinding them in a common grain mill. The flour thus obtained is pure white, and the refuse siftings or bran seldom exceed five per cent of the weight of the dried potatoes. The sulphuric acid in this process extracts the coloring matter of the potatoe, with certain other substances which would give the flour an unpleasant taste. This flour will not make good bread if used alone—it requires to be mixed with from one-half to one-third of wheaten flour."

"In growing potatoes for the manufacture of starch, (farina,) an attention to various circumstances is necessary in order to secure the largest yield of this substance. The soil, the manure, the variety of potato, its state of ripeness, and the length of time during which it has been kept, affect the quantity of starch it is capable of yielding. Some unpublished experiments made by Mr. Fleming, of Barrochan, last year, and liberally communicated by him, are very interesting. The results are exhibited in the following table:

Relative proportions of Starch and Water contained in 100 *lbs. of different varieties of Potatoes manured with Dung, with Guano, and with half Dung and half Guano together.*

Varieties.	Manure Applied.	Starch.	Refuse.	Water.
		lbs.	lbs.	lbs.
Perth Reds, ...	guano alone,	15·3	14·6	69·9
... ...	half dung, half guano,	15·5	15·2	69·5
Rough Reds, ...	guano alone,	16·0	18·5	65·5
... ...	dung and guano,	17·1	18·1	64·8
White Dons, ...	guano alone,	9·0	14·5	76·5
... ...	dung and guano,	10·2	14·9	74·9
Connaught Cups, ...	dung alone,	14·5	15·6	70·0
... ...	dung and guano,	14·4	14·3	71·2
Buffs, ...	dung and guano,	14·8	14·0	71·2
Berwickshire Blues, .	dung and guano,	14·3	15·6	71·0

REMARKS.—The potatoes were lifted before they were quite ripe. The starch was made from the whole potatoes, well washed but not scraped. The starch was dried before an open fire, and the refuse at 300° F. in an oven. I found it difficult to get all the parcels of starch to the same degree of dryness.—*W. Fleming.*

"There is a great difference, as the above shows, in the proportions of starch extracted from these different kinds of potato. The white dons, for example, yielded little more than half of what was obtained from the rough reds. On the whole, the red potatoes seem to be the best starch givers, and it appears to make little difference whether guano and dung be employed alone, or together in the proportions of half dung and half guano. The difference in the proportion of water between the white dons and the rough reds is very striking, amounting to about 2½ cwt. in the ton. Such facts as these are of importance both to the starch maker in buying his potatoes, and to the grower of potatoes who raises them for sale to the manufacturer.

A method has lately been recommended by Mr. Bög

gild, of Copenhagen, for making the potatoe more available and profitabe in feeding cattle than it has hitherto been. Potatoe starch is easily converted into grape sugar, and he proposes to take advantage of this, in order to bring the whole potato into a soluble state, to make it more easy of digestion, and thus to increase its feeding properties.

"He washes his potatoes well, steams them thoroughly, and then, *without allowing them to cool*, he cuts them in a cylinder furnished with revolving knives, or crushes them in a mill, and mixes them with a small quantity of water and 3 lbs. ground malt to every 100 lbs. of the raw potatoes. This mixture is kept in motion, and at a temperature of 140° to 180° F., for from one to five hours, when the thick gruel has acquired a sweet taste and is ready for use. Given in this state, the results of experimental trials are said to be—

1st. That it is a richer and better food for milk cows than twice the quantity of potatoes in the raw state.

2d. That it is excellent for fattening cattle and sheep, and for winter food. That it goes much farther than potatoes when merely steamed; and that it may be economically mixed up with cut hay and straw."

A letter from Copenhagen, dated April 29th, 1845, says, "This invention has been more and more appreciated and applied in my native country, (Norway,) and in Denmark, and the great advantages with which stall feeding may be introduced at considerable less expense than formerly, render it suited to general promulgation. The method has more and more gained adherents, and further comparative experiments made by scientific and experienced persons, have proved its superiority. Thus one of these experiments establishes that an increase of 1½ lbs. of flesh is obtained from 25 lbs. of potatoes—that the feeding of horses with this mash is found to be applicable and cheap, and they all confirm that potatoes used in this manner as food amply afford double the nutritive powers compared to the food formerly used."

I have heard of no experiments on the above method in this country as yet, and therefore cannot say how much credence is to be given to these statements; the matter however, is certainly worthy of a trial. A common cider mill would crush the steamed potatoes with great ease, and there is nothing in any part of the process involving much expense. Indeed I think all the hints contained in the above extracts are worthy of attention from our intelligent farmers, especially those who are far inland, away from readily accessible markets. Very truly yours, JOHN PITKIN NORTON.

MR. MITCHELL'S LETTERS—No. XI.

Geneva, Switzerland, Sept. 8, 1845.

LUTHER TUCKER, ESQ.—Within a fortnight past, I have walked over half the distance from this to Paris. Some things seen by the way, may perhaps be jotted down with interest to your readers. Wine is the great crop, and vineyards stretch along by bits, and by hundreds of acres as far as the chain of the Juras, which separate the eastern districts of France from Switzerland, and which yield immense quantities of charcoal and timber, and in little basins of the hills oats and potatoes, with stinted crops of hemp and barley. The vines are tied to stakes forty inches in height, three to four feet apart each way—are kept closely trimmed, and in many vineyards, so late as the present month, the vine dressers were plucking off the young shoots. The ground is kept light, free from weeds, and generally without intermixture of other crop; though I have seen in a few instances sugar beets and hemp growing with the vines. A light soil is preferred, and of situations, one upon the slope of a hill facing the south, is most productive—not always in quantity, but in what is of more consequence—of a better quality of wine. Particular vineyards enjoy great reputations for producing a delicious wine, which they maintain for centuries, and fields immediately beside them, though of similar exposure, and possessing the same mineralogical character, are found to fail in producing the desired flavor. The famous Burgundy wines are grown along the line of my route. The vineyards principally lie upon the slope of a chain of hills, from 800 to 1000 feet in height; the soil is of a yellowish red loam, producing good crops of Indian corn, clover, and hemp. Old vines produce the best wine—young vines, the most. The method of making, in general terms, is to tread the grapes with heavy wooden shoes in troughs, until all are broken, when they are placed in a large vat with the must, where fermentation takes place; after which the liquor is removed to lesser vats, and changed from one to the other every two or three months until fit for the cask. The wine of the young vines, or of the poorer soils, (poorer in producing delicacy of flavor,) and the produce of a poor season make up the common drink of the country, or the *vin ordinaire;* which may be found in every little auberge by the way, and in nearly every house. Its price, when ordered at the humbler taverns, is about 10 sous, or 9 cents a bottle. It is rather better than poor cider and not so good as good beer. The *vin ordinaire* of the towns is of course much better. The best of the wines sell from seven to eight francs a bottle upon the spot, ($1.30,) but only when 8 or 10 years old. Barley was another considerable crop met with upon the plains of France, but was generally weak and unpromising in appearance. The oats very late, but in many parts a good crop. The smaller grasses I scarce saw at all; some crops of clover and of vetch were of only ordinary quality. Sugar beets no better than the average of ours at home. Beans and hemp good. Upon the plains at the foot of the Juras, I was surprised to see for the first time this side of the Atlantic, large fields of Indian corn, covering from 10 to 20 acres. It was late, wanting a full month or more of ripening, (3d Sept.,) and quite small. It was neither planted in hills or drills, but stood scattered over the ground some ten inches apart, and the culture, though it must have been very inconvenient, was thorough. The fields passed would have turned 30 to 40 bushels to the acre. The season has, however, been most unfavorable—a succession of cold and wet until within a fortnight past. The vintage will be late, and it is thought, very much poorer than usual. The mode of conducting agricultural operations, so far as witnessed along the line of route, was very inferior and unbusiness like. Land laid down to the grasses left in an exceedingly rough state—hay-making lazily gone through with, and not unfrequently large quantities molded and ruined. I passed some twenty pieces of grain, which had been cut, and laid with the cradle, and then left until the kernels had sprouted from the dampness. The plowing was poorly done, and light crops the necessary consequence. I saw no ditching or draining—no subsoiling—no irrigation—which latter indeed would be difficult, since but one or two brooks were crossed from Paris to the mountains. There are no hedges or fences except in the immediate neighborhood of some of the larger towns, and cattle when pastured are attended by keepers. Pasturing in the fields is, however, not common, except upon some rich meadows which are subject to overflow, and which, with their wide extent of green, and scattered poplars, and immense herds of cattle, offered a very grateful contrast to the general monotony of the country. The appearance of the vineyards is by no means so rich as the stranger who has heard only of *La belle* France—a land teeming with oil, wine, and silk, might suppose. At a distance upon the hill slopes, they have much the appearance of a New England brush pasture; nearer by, they have an aspect peculiar to themselves, but unless when the grapes are turning—no more inviting than so many brambles, nor one half so beautiful as the broad, long, glossy green leaves, and feathery spindles, and silken ear-tops of our American corn-fields. The implements of husbandry are almost universally of the clumsy and unuseful construction; the plows entirely of wood excepting a point of steel upon the nose, of a huge size, and worked over the axle of a pair of wheels, as described in my Jersey letter of last June. The hand implements are even more awkward than the larger ones; shovels have handles four to five feet in length; hoes are very similar to the boghoes of our country; scythe snaths are formed of natural crooks of extreme clumsiness, and forks for hay are mostly of wood, tipped with rams' horns. Immediately

under the Juras, and this side them, the plows and scythes are of better character; the former resembling much our own, and without wheels. The scythes are short and broad, of thin metal, and lightly hung upon a stick into which the tholes are framed. They cut easily and closely, as I took occasion to prove by actual trial, upon the banks of the Rhone. The working cattle are to the west, horses and mules; in the interior some oxen appear, and to the east, and in the mountains, oxen are used almost exclusively. The horses are not superior except in power of endurance, and the harnesses are most cumbersome and slovenly. The oxen draw, yoked together by a straight beam passing directly across the top of their heads and bound strongly around the horns and forehead. As a consequence, their heads can be moved only up and down, and then only by common agreement. When worked singly, as they often are, the collar and trace is used. The oxen, except upon the mountains, are of good size and finely built. The cows are generally small; few are seen along the post-roads of France, but in the valleys among the mountains, vast numbers are pastured, and great quantities of cheese are sent thence to the city markets. Its quality is vastly inferior to the English or American, and its price ranges from 7 to 14 cents per pound. Butter is worth in the Paris market from 25 to 40 cents a pound. For dressing various dishes, and for frying, a cheap oil is used instead of either lard or butter. Potatoes fried in olive oil is a very common dish of the country. A plain boiled potato was not set before me from the time I left Southampton, until I reached Geneva. I need not say, they are now a luxury.

Teasles were frequent along the whole route through France, growing wild, but I saw none cultivated. Plums have been seen in abundance. Apples are not common except in particular districts, and are there inferior. Almonds and walnuts are plenty. Wine and bread with a bit of cheese is the common food of the country workers. They are indolent in habit and dirty in person. The grain is mostly reapt, and a good American cradler would lay as much in a day, as a whole family of Burgundian workers. Men, women, and children are all in the field, and there seems to be little difference in the respective amounts of their labor. I have seen a girl of eighteen at the plow stilts, and a man of forty driving. What say your Hudson demoiselles to this?

Until again, yours truly, D. G. MITCHELL.

Domestic Correspondence.

APPLICATION OF MANURE.

EDITOR OF THE CULTIVATOR—It has been said that manure is the raw material of the farmer, from which he manufactures his agricultural products. Much, but not too much, has been said in modern days, upon the modes of increasing the raw material. Permit me to call the the attention of cultivators, more particularly to its application. A good manufacturer is careful not only in procuring stock, but more especially, in working up this stock to good advantage. With too many farmers it seems to be the aim to make and apply manure, not stopping to inquire how it can *best* be applied. Green and rotted, composted and clear, it is too often applied, indiscriminately to all kinds of soil, when and where convenience or custom may direct. There can be no question that long manure is best adapted to hoed crops, and well rotted compost for a top dressing. But the principle, to which I would particularly invite attention, is that given by the Creator to Adam, and legible in all nature's works, viz: that seed produces seed after its kind; in other words, that like produces like. Look upon the stately trees of the forest. How have they attained their great dimensions? Who has been their cultivator, and what the mode of their cultivation? He, who does all things well is their culturist, and their food the decayed leaves and branches that are annually deposited at their roots. Man has been slow in learning the simple principle from the Great Teacher. It is but a recent thing that the vine dressers of France have discovered that the prunings form the best manure for the vines. It has long been observed that hog manure is exceedingly well adapted for a crop of corn. Does not the fact that hogs are generally fatted upon corn, furnish the reason of its adaptation? An experiment of a good farmer in this vicinity, bears directly upon this principle. Cutting the tops of corn for fodder, he places the bottom stalks between the rows, and upon these stalks he turns back furrows; without further manuring or plowing, he plants his corn, and his crops are above the average of those in the neighborhood. A similar experiment with potatoes has proved that the tops well covered at the time of digging, will furnish sufficient manure to ensure an equally good crop the succeeding year. Onions it is well known succeed best when sowed on the same ground year after year. Is not the rationale found in the fact that the tops are always left on the ground. Rye, has been known to grow on the same land for a course of years, with undiminished yield, with no other manure than that furnished by the stubble plowed in. Chip manure is universally recommended for promoting the growth of young fruit trees. The wherefore is found in the simple principle we lay down, that like produces like. Nature has furnished all seeds with nutriment in themselves the best adapted for the future plant. Who can doubt but that the pulp of the apple was designed as food for the seed as well as to gratify man's appetite? The blade of wheat and the sprout of the potatoe, as they first shoot forth, feed solely upon the parent stock.

The principle we have thus briefly illustrated and endeavored to prove, has important practical inferences. If the principle is true, no top dressing can be better adapted for grass than the aftermath left to decay on the ground. The manure from stock fed on hay should also be applied to grass lands, while that derived from grain should be applied to farinaceous crops. It is not necessary to carry these inferences further. They will suggest themselves to all readers of reflection.

Lee, Sept. 15, 1845. BERKSHIRE.

GUANO FOR ROSES AND GRAPE VINES.

L. TUCKER, ESQ.—Brooklyn is somewhat celebrated for its shade trees and grape vines, certainly with those who have lived here; and a man in looking up a place to rent, would almost as soon expect to find his house without a kitchen as his yard without one or two grape vines. There is no doubt it has often been the turning point in men deciding about taking a place. Nay, I may go farther, and say that most men would absolutely pay an additional fifty dollars rather than be without these adjuncts; and this feeling seems to be pretty generally appreciated, for a house is no sooner completed here, than down go the shade trees in front, and the little patch of a yard is embellished with—certainly *few* vines—and as many shrubs and flowers as can be crowded into it. But my purpose is not to describe this delightful city, (which New-York may well be jealous of,) but to give a bit of experience I have had with guano this year. I feel more like speaking of it now, as before me are a couple of heaping plates of the most delicious grapes, of the Isabella kind, I ever saw, which I think is the result of its application. I had read and heard a great deal of the wonderful power of guano upon plants, &c., and having something of a turn for experimenting as well as rural pursuits, and my field for operations being rather small, I concluded to buy a small quantity and try it upon my grape vines and house plants. I had learned about its dangerous effect unless judiciously applied; so I made a mixture of one part of guano to four of earth, a portion of which I applied to a rose bush in a pot, by digging it in about the roots; it had been doing very poorly, so much so that I thought it of small value, and had almost concluded to throw it away, believing it was merely a common garden variety, and utterly useless as a house plant. The effect upon it was truly wonderful; it commenced directly putting out new shoots, and in a short time was covered with blossoms of the most fragrant kind which remained a long time in the stem; it has since done well, and is now bearing three beautiful roses.

I have three grape vines, and being a little *scary* about using guano, I only applied it to one. The three, last year, bore very nearly alike in quantity and size of fruit, as also my neighbors' vines, each side of me. This year my *two* vines, and those of my neighbors have borne only moderately well—not as well as last year quite; but my third vine, about which I put the guano, has exceeded any thing I ever saw, both in quantity and quality, much of the fruit being as large as a fair sized walnut, with a deliciousness of flavor *positively delightful*. I have seen nothing in market or exposed in the streets of New-York for sale, that would begin with it; some of the clusters are tremendous, and I have this evening gathered from one shoot four bunches that would each cover, and well too, an ordinary tea plate. Now, whether this abundant yield is the result of my application it is impossible for me to tell, but sure am I, that my impressions of its probability are so strong, that one like experiment would make me a full believer in the efficacy of guano. A. T.

Brooklyn, L. I., October 10th, 1845.

LETTER FROM ALABAMA.

LUTHER TUCKER, ESQ.—It often happens that in this world of disappointment, our plans become frustrated. I have been brought to this reflection by the disappointment of the pleasure of a personal interview with you, as well as the pleasure of being present at the late Agricultural Fair of the State of New-York. I hope soon to receive through the columns of the different Agricultural papers, a full account of all that was done at Utica; but the best written account that can be given, I am apprised will fall far short of the reality. I had long desired to see the different states of our common union, and as far as I could, make myself acquainted with soil, climate, the products raised, the manner of cultivating the lands, &c., and on the 4th of June I set out for the purpose of travelling, having in view the above objects. I found on reaching Montgomery county, in this state, and examining the farms of several of my friends, that they have grown rich by the cultivation of the soil there. Large cotton farmers gave evidence of their wealth.

In passing up the Mississippi in the month of June, you see the extensive sugar plantations in a high state of cultivation. Indeed, as you pass up through the state of Louisiana, you are delighted with the show of comfort that is seen. I spent a month in the state of Illinois. Here I saw the finest lands of the United States. Indeed I have often understood that the best and richest lands of America were in the state of Illinois, and from what I saw I have no doubt of the truth of the assertion; and when the day comes that a set of such farmers as live in Western New-York, settle in Illinois, it must become the granary of a great part of the world.

Having spoken of the farmers of Western New-York, I must say that I was highly delighted at the appearance of farms as I passed on from Buffalo until I reached Albany. Indeed it appeared to me that every rock was made to tell us something, that every spring was turned to some account. Although the drouth had injured the crops to some extent, still such was the industry of the farmers in plowing up their fields and hauling out manure, that it was apparent they would be prepared to supply themselves with a fine crop of wheat and hay for the coming season.

The year 1845, throughout the states of Virginia, North Carolina, South Carolina, Georgia, and Alabama, will be long remembered for the severe drouth that has fallen on the country. The corn crop of this portion of Alabama, from what I can learn, has not suffered so much as the cotton crop. Indeed on my own farm, I make as much corn as I made in 1844, but will not make any over half the cotton of 1844. It is true, I did not plant as much cotton as I did that year, and should I be spared, I intend to plant less another year. My object is to make a large supply of provisions of every kind, and only plant such a crop of cotton as I can prepare in the best possible style. Indeed a large proportion of my crop of 1844, sold for over 10 cts. per lb., so that I think I will find my system in the end the most profitable. Indeed, I have made for the last two years, 16 per cent. on the capital invested in agriculture.

ALEXANDER M'DONALD.

Eufala, Barbour county, Ala., 25th Sept., 1845.

VAN ANTWERP'S PATENT CHURN DASH.

THIS dash was invented and patented by Peter Va Antwerp, of Coeymans.

The theory of this dash is very simple; but still it cannot be fully observed by any description which I can give you; it requires a trial to test its efficacy. I shall endeavor, however, to give as correct a description as possible, and if I am right in my theory, please inform me; if not, explain the true position of this dash.

It is an established and well known fact, that in the common dash, there is a flat surface; and by the ascending and descending thereof, a vacuum is left, which produces a suction, thereby impeding the course of it.

By the construction of Van Antwerp's dash, this vacuum is destroyed—the suction removed—which leaves a free and unimpeded course to the dash, and requiring but half the labor.

1st. Is the handle. 2d. The knob or head of any size, (say from 1¼ to 2½ inches in diameter,) with two rows of holes—six holes in each row—the rows being bored one inch apart. The lower row of holes are bored directly under the space left by the upper ones. 3d. The buckets or paddles, one-half an inch thick, one-half an inch wide at the tenon which enters the knob, and gradually widening to the outer extremities, to about 1¾ to 2 inches.

The upper holes, (the dash standing in an erect position,) are bored at an angle of 45 degrees, downwards; the lower holes are bored at the same angle, upwards; so that when the paddles are placed, the outer extremities of both are on an elevation. The paddles are also on an elevation of 45 degrees, sideways; thereby leaving no flat surface for a vacuum or suction.

Coeymans, N. Y., 1845. A SUBSCRIBER.

CULTURE OF WHEAT IN CONNECTICUT, &c.

LUTHER TUCKER, ESQ.—If you think the following statement of matters and things, will be of any benefit to the Agricultural community, you will please insert them in the Cultivator: To encourage the farmers throughout New England to sow more *wheat*, I can state that there has been more or less of wheat sowed on my farm for forty-five years, and there has been but two or three years at the most, when there has not been a pretty fair crop. In 1836 or 7, when there was a great scarcity of wheat throughout all the States, there was here an entire failure. On about four acres, I did not receive my seed sown that year. Since then the crops have been very good. For 15 years that I have owned the farm, there has no insect of any kind, injured the crop at all, that I am aware of. This year's crop is superb, weighing 62 lbs. to the bushel, and very plump. I generally soak my seed in strong brine, made of common salt with salt petre, 10 or 12 hours, then mix with slacked lime or plaster paris. This season I have sown on 7 acres 10 bushels of seed, raised near Seneca Lake, New-York. I generally change my seed once in 3 or 4 years.

My rye is likewise very good. I have threshed 45 bushels of rye, 350 of oats, and from 28 shocks, 15 sheaves to the shock, of wheat 36 bushels, with Badger's one horse power threshing machine, and I must say that I think it is one of the best now in use for threshing, and I have seen several different kinds in Western New-York. This machine will thresh 200 bush. of oats or 100 of rye per day, with ease to the horse, and thresh it very clean.

I should like also to state that I own a great prolific sow, which is said to be of the *Townsend thin rind breed*, which has had 79 live pigs at 5 litters: 14 at the first—15 at the second—16 at the third—18 at the fourth, and 16 at the fifth—she has raised 58 of her family. Who can beat this? CLAUDIUS ALLEN.

Cheshire, Conn., Oct. 13, 1845.

RULES FOR PLOWING.

L. TUCKER, ESQ.—I perceive that at our late Fair, two sets of premiums on plowing were awarded—one for old hands, the other for young men under 18 years of age. While cordially approving of this arrangement, permit me with all humility to suggest that in a future no. of your excellent paper, you should lay down a rule or standard, what constitutes good plowing, as great diversity of opinion exists on this subject. We find one farmer prefers a broad furrow laid flat—another a furrow standing straight on edge, while others give the preference to a narrow furrow at a given angle. How then is a plowman to know what particular description of work is, in the eye of a strange judge, the best? Whereas, if, (prior to the competition,) particular dimensions were prescribed, there would be no risk of any favor or partiality for one kind of plowing rather than another, as a carpenter with his rule and straight edge, under the direction of the judge, could at once decide which competitor best followed out the particular mode of plowing laid down. And I hold that the workman who can come nearest to the dimensions prescribed could easily plow to the satisfaction of any farmer, let his taste on the subject be what it may.

I have attended plowing matches for many years, and though I observe better plows are annually coming out, I do not mark any decided improvement in the style of plowing,—which I am inclined to attribute to the fact that at no plowing matches have particular dimensions ever been prescribed. JOHN MCCONNELL.

REMARKS.—We think it would be proper for Agricultural Societies to establish some general standard for good plowing. We find but a small proportion of all the plowing in the country, performed in what could be called a proper manner. One of the greatest and most common errors, is making too wide furrows. This error is more or less prejudicial according to the nature of the soil—the injury being greater as the soil is more compact and tenacious. If the land to be plowed is *sward*, the object is the subversion of the sod in such a manner as that the decomposition of the vegetable matter shall be rendered most valuable and available to succeeding crops, and at the same time leave the soil loose and permeable to the roots of growing plants. To consider in detail all the circumstances which promote decomposition, would require more space than we have at disposal; it may however be remarked that air, heat, and moisture, are essential requisites. But in the case under consideration, it is necessary in the first place, that the vegetable substances in the soil be placed in such a situation as to check life, else their growth will be promoted by the very principles which would otherwise produce decomposition. A complete subversion of the sod is therefore the first requisite, and this should be done in a manner most favorable to its decomposition and the benefit of the crop to be put on the land.

It is obvious that a narrow furrow, lightly laid over, would, more perfectly than a wide one, divide the soil and adapt it to the support of a crop. It is not many months, however, since we heard a farmer remark that he would not care if six or seven inches of a field he intended to plow, could all be completely turned over at once. Few would probably attempt to defend this proposition, and yet the practice of many is so much in accordance with it, they not only turn over as much at once as they possibly can, but in some cases they attempt to cover with the furrow slice that which is not even loosened by the plow.

On the relative advantages of flat and angular furrows, we are aware that much diversity of opinion prevails. For very loose and porous soils, flat furrows may be equally as good, if not better, than those laid at any angle; but excepting for such, we should decidedly prefer furrows laid in such a manner as would admit a space for air underneath.

As to the proper depth of plowing, good farmers also differ. Since the introduction of the subsoil-plow, however, we think the question more easily settled, as the loosening of the sub-stratum by that implement, at once secures all the advantages of deep tillage, while it allows a surface furrow so shallow as to be liable to none of the objections urged against deep plowing.

THE STRAWBERRY.

MR. EDITOR—Having noticed one or two (to me) apparent discrepancies in accounts relating to strawberries, I would feel obliged if you or some of your correspondents would harmonize them. First, Mr. Brice J. Goldsborough, in the April No., 1843, of the Cultivator, says he sold eighty (80) gallons of berries from 1371 plants one year old, besides what was consumed in his family, and some given his friends. Mr. Hovey says, (I believe in the 4th vol. of his Magazine,) in allusion to a bed of his seedling, that the bed did not produce twenty quarts, whereas it was large enough to have produced *two bushels*, the bed containing upwards of five thousand plants. Mr. H. according to Mr. G.'s yield, should have expected *forty* bushels, and not *two*. As I wish to plant some, I should like to know which, if either of these statements, I may take for data to guide me, in about the quantity to plant for the production of about a certain quantity of fruit, all things else being equal.

Another discordant matter I would like explained, may be gathered from the following. Mr Longworth, in Hovey's Magazine for July, 1842, writes:—"When at Mr. Cushing's, at Watertown, I was surprised to learn that his Keene's seedling bore fruit in a compartment where there was no other variety near. The Keene's seedling imported by Mr. Buist and myself, is defective in the male organs. * * * * I examined Mr. Cushing's strawberry when in blossom, and found it perfect in the male organs."

Now I would ask, how comes it that one should be perfect and the other defective, when all, (if of the true kind,) must have originated from one parent plant, and all, ad infinitum, must have inherited its peculiarities, of male or female?

Again, Mr. Philetus Phillips, in a circular dated April 1844, says—"In order to possess large and abundant fruit, we must cultivate such as have distinct male and female plants of the same variety."

Here again, I would like to know where the distinct male or female plant of the same variety could come from, as all must have originated, &c., &c., as before stated.

While writing, allow me to call for a little more charity at the hands of your correspondent, S. W., who calls the laboring man of England "dull, leaden-eyed, stupid, obsequious," for we are not exactly so, even in old England. If such expressions grow common, we shall presently have some other of your correspondents stating something to the effect that they have seen barber's blocks on American bodies. J. F.

Rochester, Oct. 7, 1845.

TO DESTROY THE RED ANT.

L. TUCKER, ESQ.—I take the liberty of sending you a very simple remedy to prevent the ravages of the small red ant, which infests the storerooms and pantries, to the no small annoyance of many a good housewife.

Though rather late in the season to be beneficial to many of your readers, it will not lose its efficacy by keeping till next summer. I was much annoyed by the above named insect this summer, and had tried every remedy that I had ever heard of, but to no purpose. I finally tried chalk, and in this way: I make a thick mark about an inch wide around the article or vessel I wish protected from the ants, at any convenient distance from the bottom of the vessel, and I find they will not attempt to pass over the chalk. I watched their motions for some time. They crawled as busily as ever, up as far as the chalk, where they seem to get very much excited, but not *one* of them attempts to pass over. I have tried the above remedy for over a month without a single failure. C. C G.

Mobile, Ala., Sept., 1845.

Cattle should not be out in cold weather.

NOTES OF TRAVEL IN THE SOUTHWEST—No. VIII.

BY SOLON ROBINSON.

Visit to Warren county—Vicksburgh—Hill-side cultivation—Orcharding—&c., &c.

Well, dear reader, are you rested? so am I, and so, if you please, we will go ahead again. During a rest of four days at Log Hall, the residence of Dr. Phillips, I have eaten more vegetables than during the four weeks that I have been on the road from St. Louis.

Leaving the examination and description of the Doctor's plantation till another day, let us mount our horses and take a ride over Warren county, and visit the city of the "Walnut Hills," the far-famed town of Vicksburgh. This county is one of several similar ones along the Mississippi river, and presents a most singular formation. It is called hilly, but I think the word side-hills would convey a more correct idea. It seems to me, from careful examination, to have been a deposit of alluvium two or three hundred feet deep. At the bottom, coarse gravel, then fine, then sand, and then a deposit some ten or twelve feet deep, of fine silex, lime and shells; now a bed of rich marly loam, above which is the fine alumina that was held longest in solution. After this deposit had lain long enough to form a stratum of limestone underneath, it was apparently disturbed by an earthquake, which left the surface in the most uneven condition of any tract of country I have ever seen. I saw many side-hills in cultivation lying at an angle of 45 degrees, and singular as it may appear, although there is not a level farm in the county, until the present season, side-hill plows have been almost unknown. Those of Barnaby & Mooer's, that I have seen, are entirely too large. If they will make a light, one-horse size and send them here, they will find a market. The few now in use are the tumbling shares.

If any of my readers are anxious to know how such steep hill sides can be cultivated, they must come and see—I cannot tell them. There are many farms that do not contain a spot of level land large enough to build a house upon; but the fertility of the soil is so great and so inexhaustible while it remains unwashed away, that it has tempted men to overcome difficulties that never would have been encountered upon poorer land. Although the cultivated hill-sides are much steeper and more numerous than those of Capt. Eggleston, yet I believe the same system could be adopted to save this excellent soil from utter destruction. Though it does not appear to wash away quite so easily as the lighter lands up north, yet I find places here gone past all redemption, and worthless for every purpose except Bermuda-grass pastures, over which nothing could range but sheep and goats. In fact the whole country looks more suitable for a sheep range than for anything else, and in no part of the United States could wool be raised to better advantage. Of the feed for them I shall speak hereafter, and as to the deterioration of the wool on account of the *climate*, I have only one word to say, and that is "*fudge!*" If any one chooses to contend for the contrary, I will bring witnesses.

We left the Doctor's place for our ride on the 25th of February, which was so hot that it was very uncomfortable. On account of the high water in the Chittaloosa, the Indian name for the "Big Black," and a much better one, to my notion, we had to go a round about way. We passed during the day, in our twenty miles ride to Vicksburgh, some very good plantations, and as is almost universal in the state, all well fenced, and but very few good dwellings. The cause, I have heretofore spoken of—difficulty of getting lumber—mill streams are among the things wanted.

Vicksburgh is built on the face of a bluff that rises from the river 200 or 300 feet high, and which is broken into sundry other bluffs and ravines, and these are multiplied by lesser ones wherever the water can get a chance to gully out the soft friable soil. The town contains a very quiet and peaceable set of order-loving inhabitants notwithstanding the bad name that they got a few years ago, by a very summary way of ridding themselves of a pack of gamblers, robbers, and murderers. It is a place of considerable business, though not half as much as it was. The railroad from here to Jackson cuts off a good deal of trade. The town is situated at the bottom of a great bend of the river, and as there is no high land on the opposite side, fears have long been entertained that the ever changing stream might make a "cut off" across the narrow part of the bend, and thus leave the town "alone in its glory." Greater changes than this have taken place. "The Walnut Hills" settlement and fort, near which the present town is built, has an ancient and historical name. It was settled by the old French explorers.

About dark we left town with the intention of riding out to a friend's house, about four or five miles—Mississippi miles, and over Mississippi roads, and through, I can't tell how many, Mississippi gates—more than we were able to find by negro directions, in a dark night, till near midnight. Late as it was, we were met at the gate in southern style—a guest never thinking of entering the house without this little ceremony.

Before pushing ourselves off in the morning, we took a stroll over the farm, and the greatest curiosity witnessed was the possibility of raising a crop upon such a wonderful uneven surface. Among the small curiosities was an alder tree eight inches in diameter, and a sumach fifteen inches in diameter. And I was assured that this latter was used abundantly on the Yazoo river for rail timber. It grows tall and straight. I visited upon this place a heavy cane-brake. If it is thought by any of my readers that cane only grows upon low, wet land, let them think more correctly. All these hill-sides were originally covered with an immense growth of cane, now fast disappearing from the country. It grows so thick upon the ground as to make it difficult to penetrate. I was unable to learn the period of time it requires to come to maturity, or whether there is any certain time. A few years ago, I think in 1830, nearly all the cane in this part of the country seeded. It then dies. The seed bears a slight resemblance to oats, and is about as nutritive. All kinds of stock are fond of young cane, and it is by the constant cropping that it is so rapidly destroyed. Its want of durability renders it of little value, though it is often used to make drying scaffolds for cotton. But all scaffolds except folding ones, are nothing but a makeshift.

The next place that I shall take notice of, is that of R. Y. Rogers, five miles from Vicksburgh, and from whom we met a most hearty welcome, and enjoyed a pleasant night visit. Mr. Rogers is one of the best farmers in the state—that is, upon a small scale, and that he does not raise a pound of cotton, affects not the truth of the assertion. For reduced by shipwrecks and other misfortunes from an abundant competency, to one pair of hands, he did not hesitate to use them. I venture to say that with his two or three negroes, and market-cart, which carries every thing he raises to Vicksburgh market, he makes more clear cash than some planters do with 200 or 300 negroes. It will be recollected that 20 to 30 bushels of corn per acre is about the average yield here; but Mr. Rogers has succeeded in raising 90 bushels per acre on his steep side-hills. He however turns his attention chiefly to marketable vegetables, and having but little competition, he reaps the benefit. I saw tomatoes in his garden to-day, Feb. 27, a foot high.

Within a short time past, Mr. Rogers has established a milk-selling business in town, and reduced the price from 40 to 25 cents per gallon. He assured me that it used to be sold for *two dollars* per gallon. After a most pleasant visit with this very intelligent gentleman and his lovely wife, he accompanied us as far as Col. Hebron's, where we met Dr. Bryant and several other gentlemen, and partook of one of the most sumptuous dinners that I have yet seen on my journey. And when we take into account the long distance between the house and kitchen, which Dr. Phillips and myself computed at twenty rods, it appears a still greater wonder how such a dinner could have been gotten upon the table in one day. This wide separation of the house and kitchen, is only an extreme of a very extraordinary fashion. If a similar fashion prevailed in Yankee land, we should hear of sundry enactments to "encourage the

building of railroads" between the two points. I will just mention that among the standing dishes at Col. H.'s dinner, was one of his *three year old* hams.

Col. H. is earnestly engaged in a system of culture that I should like to see more universally prevalent here, where it can be followed with such pleasure and profit, and for which the lands of Warren county seem so well adapted. I allude to orcharding. Col. Hebron, Dr. Phillips, and several others, are making extensive efforts to supply the New-Orleans market, particularly with peaches. In a small way, this has already been done at a most enormous profit. Raising fruit and cotton will work well together; for the great hurry with the cotton crop is in picking time, which is long after the fruit season has passed. Many planters will not plant fruit trees only for their own use; in fact many of them not even that, so that the few who do engage largely in the business will be in no danger of over supplying the demand, and may be assured of ready sales at great profits. Peaches in this vicinity ripen the last of May and through June, July, and August. What is to hinder supplying all the up-river towns with early peaches? As soon as sufficient quantities can be produced to make it an object, arrangements can be made to put the fruit in Cincinnati market in five days from the picking. Of course all nearer towns would be supplied, and this too, several weeks earlier than the orchards in the immediate vicinity would do. Not only peaches can be produced in the greatest abundance at such an early day, but various other kinds of fruit. I have not the least doubt but that more money can be cleared with forty acres of orcharding and four hands, than with ten times the quantity of land and labor devoted to cotton. Besides the immense profits arising from the sale of green fruit, a vast amount may be realized from drying it. Every plantation has plenty of hands, old and young, that could be devoted to this business, which are now worth little or nothing for any other purpose at this season of the year. I do not ask farmers to abandon their other crops for fruit, but that they make it an auxiliary. And I would like to suggest to Mississippi wives that if they will put up a few tons of their surplus fruits in the form of such rich and most beautiful preserves as I have eaten at several of their tables, they could be sure of a ready market in New-Orleans at 25 cents a pound at least. A nice little sum of extra "pin money" might thus be accumulated every year, independent of the cotton bales. Will Mississippians consent to make money at this business of raising fruit? If they do not, and that right soon too, I will take it upon myself to recommend some of the experienced fruit growers of the North to go down and do it for them. They will have no fear of ill health upon your Warren county hill-sides, and will soon show you how the thing is done. As for "glutting the market," it may do for your children to talk about that—the present generation will not live to see it. The market can never be glutted nor the culture rendered entirely unprofitable, till the price is reduced to ten cents a barrel, and then hogs can be fattened on them. Col. Hebron told me he realized ten dollars a barrel for peaches last year.

I cannot urge this subject too strongly upon the attention of Warren county citizens—I cannot urge it too strongly upon the planters to become *farmers* in the true sense of the word. I cannot urge it too strongly upon Warren county farmers to become shepherds and orchardists if they wish to see their hill-sides descend unimpaired in fertility to their children, instead of descending to the Gulf of Mexico and the gulf of destruction! Orchards, Bermuda grass, and wool, can all grow upon the same soil, while soil and owners will continue to grow rich. At present, if the owners are enriched, the soil is not.

But there are a good many other things that southerners might learn economy in. And one of the first things to learn is, that out of their own staple we furnish them almost every manufactured article, for which they pay us for carrying the raw material from the gin and press we built for them, done up in our bagging and rope, and sewed with our twine and needles, drawn upon our waggons by our horses in our harness, over roads made with our plows and hoes and spades, to our steamboats, and upon that to our ships; not forgetting to let our commission merchants have a good share of "skinnage;" and then after manufacturing, to return it in the same way to exchange for more of the raw material; by all which means we constantly keep a raw spot in your feelings; but it is not yet sufficiently "galled" to teach you to become *home manufacturers*—the only healing salve that you will ever find to cure the festering sore of "such low prices for cotton that planters cannot live by it." Would you adopt a more prosperous course? Quit planting as you understand it, and become farmers as we understand it—raise upon your farm every thing as far as possible that you eat, drink, wear, and use, and never buy an article of cotton goods except it is of home manufacture—that is, manufactured in the country where the raw material grows—and never bale your cotton in anything but cotton baling made from cotton not worth sending to market in any other shape. Get up and keep up agricultural associations, and give premiums to that farmer who shall come the nearest to raising everything he consumes, and to him who will exhibit the greatest proportion of his negroes clothed in plantation manufacture throughout—and above all things else, read and support agricultural papers.

After leaving Col. Hebron's plantation we passed over another of those great ulcers upon the face of this rich country, a tract of worn out and "thrown out" land,—gullied to death—a frequent sight that the traveller cannot avoid. Then crossing the railroad at "Bovina," a name without a town, but a place that has lately been selected for a site for a cotton factory which I hope will cause the name long to be remembered—then after the fashion of this country, having ridden through sundry plantations, and more than sundry gates, and along a "bridle path" to a new ferry over the Chittaloosa, and through "the swamp," we reached Log Hall, by hard riding, just in time to save us the necessity of spending the night upon a road I should think might be impassible in the dark, and it is next thing to it in day light. But this is one of the ways to get to the worthy Doctor's, and the others are not much better. So we will not attempt to get away again till morning.

Again adieu, SOLON ROBINSON.

VIRGINIA LANDS, &c.

Some time last spring, in writing a short communication for the Cultivator, I remarked that Virginia had the finest sheep walks in the world. Since this I am addressed privately on this subject, and to which I answer publicly.

It is the mountainous parts of Virginia which for this purpose I so highly recommend. I reside in Amherst county, 12 or 14 miles from the Blue Ridge, on the spurs of which I hold some 3000 acres of land, the greater portion of which is rich; and on which I have never failed to make my flock of sheep as fat as I desired. The soil of the greater portion of these mountains is of good quality, being in many places, one, two, and three feet deep. The hornblend and granite lands are rich; the slates are poor. The natural grasses are the green-sward, (or Kentucky blue grass,) and white clover, which never fail to appear so soon as the timber is cleared off. The timber is principally chesnut, of superior quality for building houses and fences; and in many places, locust and other valuable timber. The mountains afford abundance of purest water. No part of the world can excel those mountains in the production of rye, oats, potatoes, hemp, flax, cabbage, beets, turneps, buckwheat, orchard grass, timothy, green-sward, and white clover.

A few days past, a tract of land lying near Amherst Court-house, sold on a credit, for $6 the acre, and another adjoining, at $5 the acre. Both those tracts lie well, the soil being tolerably good, and the subsoil very good.

Near my residence, and on an excellent trunpike road, a few days past, a tract of 353 acres sold on a credit for $4 the acre, a good portion being bottom lands, and the remainder good though hilly.

Our fathers were growers of tobacco, and we are yet too much at the old trade to be growers of wool, or man

ufacturers of any thing. And again, I say, "what a fortune a Yankee could make here;" just come and see.

The late drouth has curtailed our corn to perhaps less than one-half the usual crop; the oat crop is less than half, and tobacco about half. Corn is selling at 50 cents the bushel, wheat 75 cents, oats 30 cents. Beef from $2 to $4; cows and calves, $8 to $16; common sheep, 75 cents to $1.50. Ordinary wool, 30 to 35 cents. Hire of man per month, $5 to $8; women, about nothing.

This sheet, thus far written, has been lying on my table about ten days, during which time I have ascertained that my identifying the greensward as the Kentucky blue grass, is a mistake. I have both the green sward and Kentucky blue grass, but did not know till now what the latter was. The Kentucky blue grass grows in tufts very much the size and appearance of timothy, only that the blades are of a deep green color, and glossy appearance. It appears to be quite hardy, growing both late and early, and both in wet and dry weather.

The tobacco crop is now improving wonderfully, so that in the state perhaps three-fourths of the usual crop may be marketed.

I desire to say a few more words in reference to our mountain lands. Thousands of cattle are annually fatted on the mountains of Amherst, and thousands of acres on which they roam may be bought for one shilling, and perhaps less.

I suppose it is useless to tell either a Yankee or New-Yorker that the wool growing on a sheep is proportionate and adapted to the climate in which he is, and hence one advantage or profit in feeding sheep on mountains. Sheep are very healthy, and liable to but few diseases here. I have not noticed a sheep with rot for several years; and as to foot-rot I never heard of a case in the state. The greatest pest to our sheep is the worm in the nostril, which is often mistaken for the rot; and although irrelevant, I will take occasion to say, those worms may be dislodged and cast out, by laying the sheep on his back and pouring a spoonful of oil or melted lard in each nostril.

A flock of sheep can feed plentifully on our mountains till near Christmas, and through the winter they can be supported mostly by the growing rye; the snows being light and seldom lying more than two or three days.

Suppose a flock of 600 sheep.

Sheep account.	*Dr.*
To wages, one man 12 months, ...	$100.00
" " one boy "	25.00
" finding man and boy, ...	75.00
" feeding 600 sheep the winter, ...	300.00
	$500.00
	Cr.
By 150 old and young sheep sold, ...	$225.00
" 2000 lbs. wool sold, at 35 cents, ...	700.00
	$925.00
Annual profit on $500 cost, ...	$425.00

A man and boy can attend 1000 sheep, which is perhaps as many as should be together, even in a healthy region.

This estimate does not give a just profit, but let it for the present suffice. ZA. DRUMMOND.

Amherst Co., September 10th, 1845.

REMEDY FOR "THE HOOKS."

MR. EDITOR—The remedy you give for the hooks, in the September No., is cruel and unnecessary. Mr. Youatt, in his book on the horse, describes the *haw*, commonly called hooks, as a cartilage that wipes off the horse's eye, and keeps it clean. When the eye becomes inflamed, the Haw sometimes projects. The remedy which I have known successful in several cases, after a few days application, is to dissolve sixpence worth of white vitriol in a pint of rain water, and put a drop or two in the corner of the horse's eye, two or three times a day. I have been told by one who has seen the effects of cutting out the haw, that the horses in every case became blind, not long after. Some weeks since, our family horse had a bad cough, the consequence of taking cold; after having it about ten days, I gave Homœpathic remedies, twice a day, for a week, at the end of which time the horse was well, and has been ever since. CHARLES H. TOMLINSON.

Schenectady, Oct. 1st, 1845.

THE SCAB IN SHEEP AND ITS CURE.

MR. TUCKER—Until laeely, I was under the impression that the flocks of this country were entirely free from this troublesome and infectious disease, but in some of the eastern agricultural papers, I perceive many complaints about it, and various cures suggested, which it would be wrong to let pass unnoticed. I am unable to say what causes the disease, but I do know that it has been for years, I believe I may say for centuries, a source of much trouble to the flock masters of Ireland, and that sheep coming off a journey, where they have been bought at some distant fair, have invariably shown symptoms of the disease, when the stationary flock has been entirely exempt from it. That it is infectious there is no question, and consequently every shepherd should be very careful to remove the infected sheep from the rest of the flock the moment he is discovered. In its incipient stage it is easily subdued, but if allowed to take root without applying a cure, it is very difficult to get rid of. There is no excuse for a shepherd who understands his business, allowing it to make any headway, because the symptoms are so evident, that they cannot pass unnoticed, except from palpable and unpardonable neglect, or from ignorance. On the infected part, the color of the wool becomes changed, and is easily noticed; if the disease breaks out on the neck or shoulders or along the back, which is almost always the case, the sheep is constantly throwing up its head and bending its back, as it were to ease itself by that position; if a blotch occurs on any part of the body where it can turn its head to, it takes the wool in its mouth and endeavors to pull it out. When any of these symptoms occur, the sheep is certainly more or less diseased, and should be immediately taken and examined. The shepherd should always have by him a strong decoction of tobacco, into which should be put good coarse Liverpool salt, in the proportion of $1\frac{1}{4}$ bushels to 40 gallons; the older this tobacco water is, as it is called, the better, so as it loses none of its strength. The shepherd should have a quart bottle, into which to put his tobacco-water, stopped with a cork, through which a quill is put, similar to those bottles from which bitters are served at coffee-houses. If the skin is not very thick and hard, and will yield to the finger and thumb when squeezed, all that is necessary is to divide the wool over the infected part, and from the bottle through the quill, to pour the tobacco-water, and rub it, or rather scratch it well in with the nail of the finger; if the skin is very thick and will not yield to the squeezing of the finger and thumb, you must take the small blade of your penknife, and puncture the skin, closely all over the infected part, to the depth of one-eighth of an inch, then put on your tobacco water, and rub it as before well in with the nail. One such dressing is generally sufficient, but it may be that a second light dressing may sometimes be required. There are ointments recommended by many, the principal ingredient of which is mercury, which should never be admitted to use by any good shepherd. First, if the sheep gets wet while under the influence of it, it is certain death to the animals; next, although such ointment will cure the disease, yet the remedy is as bad as the disease is itself, for it renders such portion of the fleece useless. It raises the scab from the skin and leaves it in the wool, and so disfigures it as to make it unsaleable; besides wherever the mercury touches the wool, it destroys its vitality, making it dry and brittle, and entirely useless to the manufacturer for any purpose; moreover the sheep once dressed with this ointment never regains its constitution, and is liable every spring after, to peel off its wool, from those parts that were touched with the mercury.

The tobacco juice kills the scab effectually, and doe

not raise it from the skin to disfigure the fleece. In its use in any weather there is no risk to the life or health of the animal, neither has it any bad effect on the wool, and although it stains the wool for the time being, yet when the fleece is washed, such stain then entirely disappears. It should be borne in mind by all owners of sheep, that there is no better *preventive* for scab, than to wash the sheep after being shorn, with strong brine and a brush. Yours very truly, GRAZIER.

PLAN OF A STABLE AND CARRIAGE HOUSE.

The size may be made to suit the wants of the builder. I would dispense with racks, as they add to the expense and are unnecessary. If the mangers be placed about two feet from the partition, the space will be sufficient to hold all the hay needed at one time.

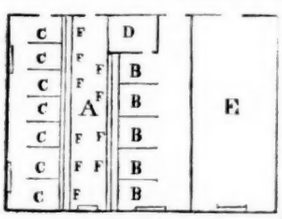


Fig. 94.

From the feed-room, oats, corn, cut hay, &c. may be placed in the manger, through openings in the partition, without entering the stable or passing from stall to stall. The second story is the hay loft from which the hay may be dropped at once into the manger, through openings. In the December number of the Cultivator, 1844, p. 385, are some interesting suggestions relative to the size of stalls, materials, mangers, &c., suitable for this plan.

REFERENCES.—A, Feed-room B, C, Stalls. D, Harness and saddle room. E, Carriage-house. F, openings from the feed room. Mangers indicated by parallel lines; windows by double marks. YARROW.

CONSTRUCTION OF ICE HOUSES.

"What is the most approved plan of constructing an ice-house where the springs at certain seasons of the year are within four feet of the surface of the ground."—*Cultivator of Sept.*, 1845, *p.* 291.

Our plan for building an ice-house in any situation, is this:—Lay a good stone foundation in lime mortar, as you would for any other building, raising it about 18 inches above the surface of the earth—10 feet by 15 feet is large enough for the necessities of almost any private family. Have your studs 12 inches broad by 2 inches thick—rafters the same—10 feet from the sills to the plates. Run a partition around the corner, that the entrance may be about 5 feet square—doors 2½ feet wide. Fill the space within the foundation wall 3 or 4 inches above the top of the sill, with tan bark, so that it shall be at least two feet deep after being well stamped down. Then board the inside tight with well seasoned boards, roof and sides;) nail on a board all round the outside and fill the space with tan bark well jammed in, and so proceed till you arrive at the ridge, making every space and vacancy tight with the bark. Afterwards shingle and clapboard as you like. Thatch, well put on, would probably be best, but shingles are well enough. The partition should be double, and a space of 6 inches filled with tan-bark. The doors should be so constructed as to be filled four inches thick with bark. The whole, except the doors and casings, may be of rough hemlock lumber. This is much after the West India manner of building ice-houses, where ice is kept many months, always entirely above ground, with the thermometer averaging about 80 degrees Fahrenheit.

Great care should be taken in packing in, which should be well covered with straw, with water sprinkled over it, and stowed away during the coldest weather. The doors of the ice-house should be left open during some of the coldest days and nights immediately succeeding—then close all tight—

> "Till tyrant heat, dispreading through the sky,
> With rapid sway, his burning influence darts
> On man and beast, and herb and tepid stream,"

when you will find yourself possessed of the luxury laid by in store. FARMER C.

Manlius, Sept. 22d, 1845.

BOG CUTTER.—(Fig. 95.)

MR. EDITOR—In your September number, under hints for the season, page 286, I saw an inquiry made respecting a tool for cutting bogs or tussocks. We have formerly used the bog hoe as there mentioned, but this is both *slow* and *hard*. Two years ago I invented a tool, (which I believe I have mentioned before, calling it an ox-jointer,) that does the work well. It is a triangular knife.

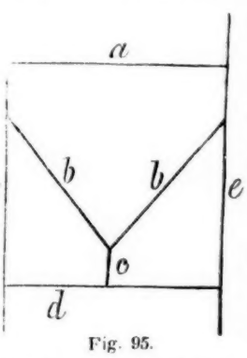


Fig. 95.

The hypothenuse is four feet, made of a bar of iron, 3 inches wide, five-eighths of an inch thick, laid with good steel, with the face side down, that it may keep close to the ground; the ends of the two legs are framed into a short sled, on the under side, and shod over these ends with an old worn cart tire; (the sled is four feet wide and the same in length.) An upright knife is screwed into the angular point of the knife and the hinder beam of the sled, which steadies the knife, and divides the tussocks, making them lighter to remove. I hitch a chain to the end of each runner of the sled, put on one pair of oxen, and ride on the sled. In this way I cut 3 or 4 acres per day. Where the tussocks, knobs, or bunches, are thick, the knife must be ground quite sharp. It will not work among stones. SAMUEL CAMP.

EXPLANAION.—*a*. Forward beam of steel—*b b*. The two wings of the knife—*c*. Upright knife—*d*. Hind beam of sled.

Plainville, Ct., Oct. 11th, 1845.

REMARKABLE CALF.

MR. TUCKER—I paid a visit a few days since to the Messrs. Root, who are among the best of our Genesee farmers, to see a calf in their possession, which has become quite a subject of remark in this region, and is, in truth, a very remarkable animal. He is now over two months old. He weighed 101 lbs., at birth; at the end of four weeks, 203 lbs; and in two months time, 312 lbs. These weighings were attended by suitable witnesses. His color, is a deep red, and so perfectly formed is he, that the best judges say they find not the slightest room for censure. He is very matured in appearance, though by no means dwarfishly disposed, as you have already learned from the foregoing. The insertion of his tail, especially resembles very much that of a fat ox. He is four feet in girth. He was sired by a two year old of the Durham and Devonshire breeds, seven-eights of the former, and measuring seven feet. His mother is a cross of the same breeds. They are both unusually fine animals. The calf is visited quite frequently from all parts, ladies and gentlemen. We think him quite a wonder here. Some go so far as to say that no such animal can be found in the country. At any rate we should be glad of any information you may be pleased to give us on the subject. AN AMATEUR

York, Livingston Co.

APPLES FOR HOGS.

MR. EDITOR—I have kept my hogs on apples every fall and winter for ten years past. I put rather more meal with my apples than people usually do when they boil potatoes; but not enough to keep the hogs alive if they had no apples. My hogs usually look better in the spring than any of my neighbor's, that are fed on potatoes. In fact, they thrive and keep fat all winter. I lay my apples in a large bin in my hog-pen, let them freeze when the weather becomes very cold, then cover them up with rye straw and keep them frozen all winter. When I want to use them, I put them on my stove in a large pot or kettle, let them be on just long enough to take the frost out of them and feed them to the hogs warm Some people only turn warm water on them and

thus take out the frost. Boiling or thawing them takes the sourness or acid all out of them, and renders them more palatable and nourishing. I give each hog one-third of a pailfull of apples at a time, three times a day. If I fed them on potatoes, I should give them nearly as many in quantity, as I do apples; therefore, I think a bushel of apples is worth nearly as much for hogs as a bushel of potatoes. It is my opinion that our farmers better set out more orchards rather than cut down what they now have. The old orchards are fast going to decay in this vicinity, and the rising generation will want for apples unless there is more trees set out soon.

HORACE GOODHUE.

P. S. I feed good mellow sour and some sweet apples to my hogs in the fall, both to my fat hogs and shoats, every day, and think that they both make them grow and help towards fatting them.

Westminstor, Vt., Oct. 9, 1845.

CEMENT WATER PIPES.

LUTHUR TUCKER, ESQ.—I was interested in a communication on Cement for aqueducts, in the third vol. Genesee Farmer, p. 55. I have waited with some anxiety to learn the result of the experiment. At first sight, the communication refered to, appears plain and practicable; yet, to one entirely unacquainted with the business, it is blind, entirely blind on the most difficult point.

I have seen nothing since that date, to throw any new light on the subject, excepting your last August No., recommending common lime.

What should be the thickness of cement around the bore sufficient to bear a pressure of six feet of water?

For a double pumpstock, where the water enters, rises, passing down the opposite side and off to another outlet, what is the method of building, uniting with the aqueduct, and securing from the frost? Also, what is water lime worth at Albany?

I should be happy to receive an answer to the above questions, by some experienced man, either by letter, or through your valuable paper.

Also, by one that knows the expense and utility of cloth for covering buildings; what kind of cloth would be cheapest; what paints are used to make it water proof?

WM. F. GUERNSEY.

Rochester, Vt., Oct. 14, 1845.

We shall be glad to receive an answer to the above, from some of our subscribers.—EDS.

THE PUMPKIN.

ED. CULTIVATOR—In the various excellent tables of analysis which have of late years been supplied to farmers by Liebig, Johnston, Dana, and others, I have been unable to find any analysis whatever of the common pumpkin. Although many thousand bushels must annually be produced in this country, and greatly assist the farmer in fattening and keeping his stock, even Mr. Ellsworth in his last report as Commissioner of the Patent Office, makes no mention of them. As I regularly sow and grow this fruit with my corn, and as it is a general practice with farmers in my neighborhood, I am desirous of ascertaining, if possible, the following facts, and you would much oblige me, and others, by answering the succeeding questions, if the subject has been investigated:

1. What are the component parts of the pumpkin, as compared with potatoes, ruta baga, and carrots, and what is their comparative *chemical* value as food?

2. Do they, or do they not, to any notable extent, deteriorate the land; and do they injure the crop of corn with which they are growing when planted in every two or three alternate hills?

3. In what part does the fattening quality lie; in the seeds *alone*, which are obviously oily, or in the whole fruit; and do they, like peas, add chiefly to the flesh; or like corn to the fat, or do they do both?

4. Is there any peculiar process whereby the crop may be greatly increased, independent of the ordinary manuring and working of the corn, of which, of course, they partake.

As I find this a very valuable and cheap crop for *starting* the fattening of my pork and beef, I should wish if possible, to increase the crop, should I find that it does not lessen the still more valuable crop of corn.

Very obediently yours, CHARLES FOX.

Grosse Ile, Michigan, Oct. 3, 1845.

We are unable to point to any analysis of the pumpkin but practical farmers know that it is very valuable for feeding stock. It will fatten animals rapidly, and for producing rich milk, we scarcely know any thing equal to it. We have never considered them an exhausting crop to the land; like other broad leaved plants they are thought to draw their nourishment largely from the atmosphere—but we have sometimes had the ground in cornfields so completely covered with the vines, that they hindered the corn from filling and ripening by obstructing the heat of the sun.—[ED.

IMPORTATION OF SPANISH MERINO SHEEP.

Weybridge, Vt., Oct. 20, 1845.

LUTHUR TUCKER, ESQ.—You may well recollect that D. Jay Browne, Esq., of the city of N. Y., last spring gave us several interesting and valuable letters through the American Agriculturist, relating to 'Sheep Husbandry in Spain." Having had the pleasure of meeting Mr. Browne last summer, I learned that an earlier importation of Spanish Merinos than we have had any account of, was introduced by William Foster, a merchant of Boston.

I therefore wrote to Mr. Foster, and also to Mr. Sales, the Spanish Professor in Harvard College, whom I also learned was knowing to the fact. From the latter gentleman, I have received the following reply:

S. W. JEWETT.

LETTER FROM PROF. SALES.

Cambridge, Oct. 9, 1845.

MR. S. W. JEWETT—I received your esteemed favor of the 25th of last month in due time, and should have answered it sooner if I could have had the good fortune of seeing my good and old friend, the Hon. Wm. Foster, of Boston, who was the real, and I believe the first importer of merino sheep in this country. Not having been able to find him, having since called at his residence in said city, I left a line requesting him to give me the information you desire, and the following is an extract of what he has this day written to me:

"You will remember that when we came from Spain together, in April 1793, in the ship Bald Eagle, Captain John Atkins, you and I were at that age in which young folks love to take risks, and to do extraordinary things; accordingly, I smuggled from Cadiz, three merino sheep, and a valuable painting of "Rebecca at the well," by Murillo, prohibited under severe penalties. The painting I found a few years ago, (being reminded by you of its existence) in Col. Sargeant's garret. I gave it to the Boston Athenæum, where it is much valued. The three sheep I bought of a drover from the Sierra Morena, on the condition that he should bring them down with the drove, for the shambles, and deliver them outside the city gates, to a certain fisherman, who smuggled them on board our ship. They arrived safe after a long passage and much sickness, and I gave them, as you well remember, to Andrew Craigie, Esq, of Cambridge. Soon after I went to France, where I passed fifteen years of the Revolution. On my return, meeting one day Mr. Craigie at a sale of merinos, where he paid $1000 a piece for them, I asked him what became of the Ram and two Ewes. He answered, very innocently, that he ate them, they being of no value, as we had no manufacturers. That, in fact, he did remember that they were merinos. So ended my speculation."

The foregoing information is, as you see, *authentic* as to your request, and if I can at any time be of further service to you, command me freely.

I remain, dear sir, very respectfully,

Your obedient servant, F. SALES."

HEATED AIR.

"A hot air apparatus," says the late John Loudon, "complete in all its parts, is a desideratum yet to be reached." It is believed that the "Hot Air Furnace," brought into notice, and recently much improved by the subscriber, will give entire satisfaction to those who desire *summer all the year.* Unlike the coal furnace, it does not decompose the air, or in any way unfit it for respiration, but a large volume is constantly introduced at a low temperature. The increasing demand for this apparatus, where it is most known, is the best testimonial in its favor; but numerous references to individuals and public institutions can be given if desired. Post-paid letters of inquiry, or orders, promptly answered if addressed to WILLIAM R. SMITH.

Macedon, Wayne county, N. Y.

BOTANICAL TOUR.—No. IV.

MR TUCKER—On the 5th of May, I left Dandridge in Tennessee, and went thirty miles up the French Broad river, to Mr. Huff's, on the road to the Warm Springs in North Carolina. The next day about noon, arrived at Painted Rock, six miles east of the springs. The road from Dandridge up the French Broad, presents some grand and beautiful scenery; sometimes the river pursues a quiet crooked course along broad and rich valleys, and again it is pent up between mountains, and then it rushes with a foaming current as if anxious to obtain quiet in the plains below. To me the scene was inspiring. I felt new life—new vigor—besides my eyes were gladdened with the sight of some rare and beautiful flowers, among which were the *Dielytra formosa* (D. C.) and *Cladrastis lutea,* (Raf.) or yellow wood. The former grew in the greatest profusion in tufts on the precipitous sides of the rocks, overhanging the river, near the rock. Of the yellow wood, I saw but one tree, but was informed that others grew in the vicinity of the Warm Springs. It has large white flowers, resembling the common locust. I was told that a decoction of its roots was of great use in cases of consumption. After dinner I sallied out among the mountains in the vicinity of Painted Rock, on the road towards Greenville, and collected *Viola hastata* (Mx.) *Convallaria majalis,* (lilly of the valley,) which occurs frequently on the Allegany mountains, and is also a native of the mountainous districts of Europe. *Convallaria umbellata* was also common. *Andromeda recurva* (nobis,) a small shrub, in flower, was of frequent occurrence, but its locality appears to be quite limited, as I did not afterwards find it. *Buckleya distichifolia,* (Torr.) a new genus, occurs frequently on the banks of a small stream a few rods above the rock. It grows also along the road in the vicinity of the Warm Springs. It is a shrub, four to six feet high, with pinnate leaves, and has recently been introduced into the Botanical Garden of Harvard University by Prof. Gray, one of the well known authors of the Flora of North America, which, when completed, will undoubtedly be our very best Botanical work.

Painted Rock is on the line between the States of Tennessee and North Carolina, and derives its name from several large spots of red paint at the height of about twenty feet on the perpendicular rock of a part of the mountain facing the river. These spots are said to have been made by the Indians, but for what purpose I could not ascertain. These rocks are composed of a silicious Graywacke, reposing on a bed of granular limestone, which last occurs at the Warm Springs. A large portion of East Tennessee, or that part of the State lying east of the Cumberland mountains, is composed of strata of Graywacke slate, limestone, and sandstone, alternating with each other, by which it will be seen that it contains the elements of a good soil. It is also rich in iron ore, which is manufactured to considerable extent. The traveller cannot fail to be struck with the luxuriant appearance of the vegetation; even the sides and table lands of the mountain are generally composed of a rich vegetable mould, covered with the pea vine, (vicia,) mixed with native grasses and white clover, affording an excellent range for stock. The white clover seems to delight in these mountain situations, and is already widely diffused. No country can be better calculated for the raising of sheep. The mountains would afford an excellent summer range, while the sheltered situations of the valleys would yield ample protection during the winter. The growth of timber is magnificent, composed in part of numerous species of oak, (*Quercus,*) chesnut, (*Castanea vesca,*) hard maple, (*Acer sacharinum,* sour gum, (*Nyssa sylvetica,*) sweet gum, (*Liquidamber,*) American holly, (*Ilex opaca,*) several species of pine, the white elm, (*Ulmus Americana,*) white beech, (*Fagus sylvestris,*) several species of magnolia, poplar or white wood, (*Liriodendron tulipifera,*) and along the banks of the smaller streams the hemlock spruce, (*Abies canadensis.*) Nearly all of these attain a large size. Possessed of a fine healthy climate, a good soil, with numerous rivers and mountain streams affording water power for manufactories, East Tennessee has all the elements to support a dense and happy population.

S. B. BUCKLEY.

West Dresden, Yates Co. N. Y., Oct. 15, 1845.

INQUIRIES.

A gentleman sends us the following queries in relation to the culture of broom corn. Answers to them would undoubtedly benefit the public generally, and we shall feel obliged to any one who will furnish the information wanted:

"1st. What kind of soil is best adapted to its growth?

"2d. In the present condition of the markets, is the culture profitable?

"3d. What amount in value can be produced on an acre, and what the probable nett profits?

"4th. Is it probable that the increased production will be likely to overstock the market and render the culture less profitable than it is now?

"5th. Is there any difficulty in procuring the seed necessary to plant fifty or an hundred acres, and at what price per bushel?"

FISH PONDS.—B. H. (New Lisbon.) We have often seen ponds of the size you mention, with plenty of fish in them. As to the kinds of fish suitable we are hardly able to give an opinion. If the water is clear and cold, which from its coming from a spring we should naturally infer, trout would probably do well. Pickerel might do well enough for *themselves,* but they have so much of the shark nature that they will exterminate all other species, in small ponds. As to gold fish, we think it likely they could be obtained of Mr. R. L. PELL, of Pelham, Ulster county.

RUSSIAN BEE-HIVE.—The third No. of Johnson's Farmer's Encyclopædia contains a drawing and description of a "Russian Bee-Hive." I wish to enquire, if any of your subscribers have made trial of it, and will report thereof through your journal. No mechanic in this vicinity will undertake to make one from the description there given, and I should like to know if one can be obtained elsewhere. E. G. R.

SOILING—*Greenwood,* (Princeton, N. J.) The first crop usually used for soiling, before red clover will do to cut, is rye, which should be sown on good warm land early in the fall.

CURING PORK.—In runnning over the October No. of the Cultivator, I notice, what I presume, to most of your readers, is a rather new method of preserving pork. You request, if others have practiced the same method, to give information of the results. I have for the last four years practiced the same method with the slight difference of letting it remain unpacked until the animal heat is all exhausted; then pack it with Turk's Island or rock salt, and pour on the brine boiling hot. I likewise heat my pickle for my hams the same way. I think it a decided improvement—it makes pork and hams very tender and of excellent flavor, and keeps them sweet the year round. It is almost universally practiced in my neighborhood with the best results.

PROSPER ELITHARP.

Bridport, Vt., October 10, 1845.

EXPERIMENTS WITH GUANO.

MR. L. TUCKER—Having tried numerous experiments with guano and stable manure, I send you the results. If you think it is worth a place in your truly valuable Cultivator, it is at your pleasure.

1. Four rows of potatoes planted in March—a small quantity of guano strewed in the rows with the potatoes. Four rows planted at the same time, abundantly manured with stable dung. In three rows were more potatoes than in the four manured with guano: the rows manured with guano were easily distinguished by the deep green foliage.

2. Rows of Lima beans manured with guano, about one gill to each hill. The beans sown did not germinate. I believe the guano killed them. I transplanted some in the hills, but I did not observe any difference between the produce of them and the two rows richly manured with stable dung. The foliage of the former was of a deeper green than the latter.

3. Two rows of maize, richly manured with stable dung; two rows with guano, well mixed with the soil; one row with charcoal. The two rows manured with guano were more productive than the other three.

I have tried different experiments with maize and guano. In some I used from half to a gill in each hill, but it proved a failure. The guano should be broken fine, and strewed over the ground as thick as grass seed—after that well mixed with the soil.

4. Two pieces of ground of equal size, the one part manured with guano, the other part with stable dung. They were sown with Ruta Baga Turneps. The part manured with guano proved the best crop.

5. A north border planted with Broccoli. One part manured with guano, the other with stable dung. No difference.

In the summer of 1844, at this place there was a piece of green clover plowed in, and in the autumn it was manured with guano and sown to grass. This autumn it has a good appearance; there is also among it a great crop of ambrosia elatior, ripening off a fine sample of seed. I have been told that this weed will not injure the crop of grass! It reminds me of old Tusser's advice:

"Slack never thy weeding, for dearth nor for cheap,
The corn shall reward it, ere ever he reap,
And 'specially where he do trust for to seed,
Let that be well used, the better to spead."

R. PARNELL,
Gardener to D. F. Manice, Esq.

Oatland, Hempstead, Oct. 23d, 1845.

THE PEAR.

MR. TUCKER—I send you some pears, raised from grafts handed to me by an old countryman. As I first introduced it into notice, it is called in Oswego, "Worden's Meadow," (not Bleeker's Meadow.) The tree is every way right; bears young, grows vigorously, and bears large crops of fair fruit every year, and is worthy of extensive cultivation. Fruit from medium to large, form variable with a knobby and uneven surface; flesh very fine grained, melting, juicy, sweet, musky, and high flavored; yellow at maturity. This pear must be picked and matured in the house, which takes place from the 10th to the 15th of Sept., as the seasons vary. It is not so good this season, owing to the drouth.

I discover that the cultivation of the pear is much neglected by our farmers, the objection being that it takes so long to come into bearing; but this is not the case: and for the benefit of farmers, I will mention those that bear young and are good:

Summer Fruit.—Bloodgood, Julienne, Petit Muscat, William's Bonchretien or Bartlett.

Autumn Fruit.—Andrews, Cushing, Seckel, Frederic of Wurtemburg, Napoleon, Flemish Beauty, Brown Beurre, Vergalieu. SCHUYLER WORDEN.

Oswego, Sept. 13th, 1845.

WHARF RATS—INQUIRY.

MR. L. TUCKER—Since the building of the Chenango Canal, a new kind of rat has been introduced among us, called the wharf rat. They seem to possess more cunning in eluding the efforts of rat-catchers, than any species of rat hitherto known among us; and such is their astonishing increase and industry of mischief, that it has become a subject of serious inquiry among farmers living within 8 or 10 miles of the canal, how to get rid of them. I have searched your Cultivator for information, and have seen nothing upon the subject. Will you give us any information which you may have got through any of your various correspondents, and if you have none, you will oblige a numerous class of subscribers by asking for information through your paper.

Binghamton, Oct. 10, 1845. G. E. J.

NEW-YORK STATE AG. SOCIETY.

The monthly meeting of the Executive Committee of the N. Y. S. Ag. Society, was held at the Society's Hall, Albany, on the 9th Oct.—the President, B. P. JOHNSON, Esq. in the chair.

The Recording Secretary presented a package of Russian pamphlets, received for the Society, from CHARLES CRAMER, Esq. of St. Petersburgh, consisting of,

1. Zembnilsky, on the Localities of Diamonds in Russia—2. Historical account of the celebrated Sanic Diamond, by the same author—3. On the use of Granite in St. Petersburgh, by the same—4. Mineralogical System of Mohs, by the same—5. Kutorga's Description of Petrifactions found near Sympheropol—6. Brykoff, on the Locality of Gryphotes in the government of Orloff—7. Obodoffsky's translation of Buckland's Petrified Sago plants, of the island of Portland—8. Sturm's translation of Fuch's Theory—9. Machin's Chemical analysis of Platina from the Ural mountains—10. Analysis of an Aeseolite fallen in the government of Smorcusk, 1818—11. and 12. Wonders of Nature in North America, Parts 1, and 2, by CHARLES CRAMER.

A copy of the "American Shepherd," was received from the author, L. A. MORRELL, Esq.

The thanks of the Society were voted to Messrs. Cramer and Morrell for these donations, which were ordered to be placed in the Society's Library.

A plan and view of the show grounds of the late exhibitions at Utica, were presented, drawn by J. J. Thomas, and views of Floral Hall, and the temples of Ceres, Pomona and Flora, drawn by Dr. Thompson, which were ordered to be engraved for the Transactions.

A resolution was passed directing the publication of Mr. Quincy's Address in pamphlet, as soon as it should be received from the author.

Resolved, That the Treasurer purchase a model of the celebrated Broughton Prize Heifer, for the Society's rooms.

After auditing various accounts and the transaction of other business, the Executive Committee adjourned to the 2d Thursday of November, at 10 o'clock, A. M.

PREMIUMS.—All premiums, whether cash, medals or diplomas, will be paid on application, to LUTHER TUCKER, Rec. Sec'y, No. 20, Market-st., Albany.

IMPORTANT TRIAL AND DECISION.—The United States Circuit Court, now in session in this city, Judge Nelson presiding, has been engaged for the last three days in the trial of a very important patent case. Benjamin H. Wood, executor of Jethro Wood, sued —— Antony for an infringement upon the patent which Jethro Wood had taken out for "Wood's Plow," an invention of his own. This article is in general use throughout the United States, and scientific writers have said that it has been a more beneficial improvement than any other of the present century, except the steam engine. We understand that the rights of the patentee had been so generally infringed upon as to render his invention almost useless to him, so far as pecuniary benefit was concerned. The jury after a patient hearing of the evidence, and the addresses of the able counsel engaged, returned a *verdict for the plaintiff.* The effect of this verdict is to establish the patent of Wood to this useful invention, and thus put an end to the infringement upon his rights. Counsel for the plaintiff, W. H. Seward, Samuel Stevens and Z. A. Leland, esq'rs; for the defendant, Daniel Wright, esq.—*Albany Ev. Journal.*

MR. COLMAN'S EUROPEAN AG. TOUR—PART IV.

Although some might be disposed to argue as an objection to this, as well as to former portions of this work, that it is not sufficiently confined to the details of agriculture, we must be allowed to say that we have been deeply interested in its perusal, and we doubt not this would be the response of much the larger portion of its readers. The state of our columns when this part of the work was received, precludes our giving a very extended notice of its contents. It is divided into sixteen general chapters, the first of which consist of General Considerations; the others as follows:

Agriculture as a Commercial Pursuit: Markets—Cattle Markets; Falkirk Tryst; The Ballinasloe Fair; The Galway Fair; Smithfield, London; Grain Markets; Grain Markets out of London; The Corn Exchange in Mark-Lane, London; Corn Duties; Mode of Adjusting Labor and Wages; The Dead Markets; Vegetable and Fruit Markets; Market Gardens; Covent Garden Markets; General Markets.

Mr. Colman thinks—"The English farmers have great advantages in their markets and exchanges; and in this matter, to a certain extent, we ought to follow them." * * * "Our farmers sell as they can to agents or purchasers travelling through the country, and buy as they can, and where, by chance, after taking, in many cases, long and expensive journeys, they may find the stock which they need. A wool fair or market is not within my knowledge held in the country, nor a corn or grain market." * * * "These evils might be remedied and a change affected to the great advantage of buyers and sellers, by the adoption of the system of weekly or periodical markets, which prevail throughout England and Scotland. Here are wool fairs, for the sale of wool, of which samples are exhibited; and corn and grain markets, where wheat, barley, oats, rye, beans, and peas, samples of which are exhibited and sold; and markets for the sale of fat cattle, and markets for the sale of lean cattle, and markets for the sale of horses, and markets for the sale of sheep, and markets for the sale of cheese and butter; these markets sometimes uniting several objects, or otherwise limited to some single object."

The immense number of people and animals which are collected at these fairs is astonishing. At the Falkirk Tryst, in Scotland, for instance, Mr. C. says:—"It was estimated, when I was there, that the number of cattle then on the ground exceeded fifty thousand head, and of sheep seventy thousand; and the banker informed me that the money employed in the negotiations would exceed £300,000, or one million and a half of dollars."

CHARACTER OF LIVE STOCK.—Mr. Colman thinks "there is no agricultural improvement in England so great and striking as that which has been affected in their live stock." "I refer," he continues, "particularly to its size, aptitude to fatten, early maturity, symmetry, and beauty. Of the milking and dairy properties of their stock, I shall speak hereafter. A person has only to go into Smithfield Market to remark the perfection to which the art of breeding has been carried, and the distinctness of the lines by which the different breeds are separated from each other. Three great points seem to have been gained. The first is, great size and weight have been attained; the second is, the tendency to fatten, and to keep in fat condition has been greatly cultivated; the third is, that the animal arrives early at maturity. All these are most important points; the last certainly not least; for if an animal can be brought to the same size, without doubling the expense, at eighteen months old, that he could formerly be made to reach not sooner than at three years of age, the quick returns, so essential in commercial transactions, are secured, and the expenses are lessened the profits are greatly increased. Nothing strikes one with more surprise than to see what, in the improvement of stock, intelligence, skill, and perseverance can effect."

The dressed weight of the cattle in the Smithfield Market, at from two to three years old, is stated to be from 656 to 800 pounds, the four quarters. The average dressed weight of sheep is given at 90 pounds. In regard to the quality of the meat, Mr Colman says:—"The fatness of the beef and mutton is remarkable. I have seen single beasts in the United States as fat as any I have seen here; but these are comparatively rare exceptions; and here the general character of the beasts and sheep is, in this respect, most striking." He thinks, however, that our meats have a sweetness and flavor not possessed by those of England, which he attributes to the greater age of our animals, (they not being usually killed until five to seven years old,) and the superior excellence of our Indian corn as a fattening food.

Mr. Colman remarks that *mutton* is the prevailing and favorite dish on all English tables. We add, that it would undoubtedly be so in this country, if there was plenty of the same kind that is used there. "It is," says Mr. C., "a remarkable fact that mutton is the prevalent dish at the public schools and colleges. At the Blue Coat School in London, for example, it is the sole meat for the eight hundred boys, four or five days out of seven. The same is the case, I am told, at Eton; and this not, as I had supposed, from its comparative cheapness, but from experience, and the opinion of medical men, that it is the most wholesome diet, and least likely to interfere with intellectual application and health. The South Down and Leicester sheep are generally preferred, though the small Welsh mutton, for its exquisite flavor, is most esteemed; and the beef and mutton, and lamb, is every where most striking. Indeed, in the English market, lean meat is hardly to be seen."

KINDS OF BREAD.—In regard to the project of introducing Indian corn into Great Britain, which some seem to have entertained, Mr. Colman thinks it impracticable. The idea of feeding the poor on it is in his opinion out of the question. "They will not eat it. If the rich were to adopt it as a luxury, their example or estimation of it might have its usual effects; but to commend it to the exclusive use of the poorer classes as a kind of cheap bread, acknowledged inferior, though it were as sweet as the ancient manna, would be met with that pride of resentment, which anything short of absolute starvation would scarcely be able to overcome." The advantages in a commercial view which would accrue to this country from the admission of Indian corn into Great Britain, Mr. Colman thinks would not be great, as "there is reason to believe if its admission were free, the supplies of this article from the shores of the Mediterranean would nearly preclude the competition of the United States."

ENGLISH APPLES AND OTHER FRUIT.—American apples are acknowledged superior to any brought into the English markets. The English apples are said to be inferior except for cooking purposes. "The superiority of our Newtown pippin," says Mr. C., "is every where admitted and proclaimed. Of other of our fine apples—such as the Golden russet, the Baldwin, the Blue pearmain, and many others—I have seen none, though it is not to be confidently inferred from that circumstance that none are imported. Large quantities of apples are sent from the United States to England and sold to advantage." Pears are considerably cultivated, but Mr. Colman thinks he has seen none equal to the Seckel and the Bartlett produced in this country. Filberts are cultivated in some parts of England for the market. A gravelly soil is chosen for them, "where they are raised on small bushes or trees, with one stem, and suffered to grow not more than five or six feet high. They grow together on the same ground with hops, and pear or apple-trees; and the proportionate number of each to an acre, is stated at 800 hills of hops, 200 filberts, and 40 apple or pear-trees. The hops are said to last twelve years, the filberts thirty, and after that the apples and pears require the whole ground."

POTATOES.—Mr. Colman considers the potatoes grown in England of superior quality, though he thinks them inferior to those grown in Nova Scotia. He complains that he did not find a potatoe in Ireland that he could eat, they being always only partly cooked—the Irish preferring to have them "with the bone in the middle." He was told that the advantage of this was that the potatoes were longer in digestion, and hunger did not return so quick. He found this, however, to be the mode of cooking, not only among the poor, but among rich and higher classes in Ireland. In the south of England Mr. C. states that land is rented at 20 pounds, or a hundred dollars an

acre per annum for the production of potatoes for the London markets. The greatest pains are taken to obtain them early. "The mode of sprouting them," he says, "is similar to that adopted by the spirited cultivators at West Cambridge, near Boston, where the setts are started under a bed of fresh horse dung, on the sunny and protected side of a hill."

GRAPES.—Mr. C. quotes from a practical gardener, some directions for the management of vines as follows: "With regard to the best way to manage the vine when fruiting, I invariably stop the shoot *one* eye above the bunch; and it is the practice of the best gardeners in England. I generally leave one shoot not stopped without fruit, and to fruit next season, and cut the shoots out that have borne fruit this year. On the shoot-spur system, every shoot is stopped an eye above the bunch, except the top one, and then it must be managed like the rest; all the lateral shoots *must be stopped one eye* above another, until they cease growing, as the more leaves you get, the fruit will swell larger."

MARKET GARDENS.—The extent of ground required for supplying London and the other large English markets with vegetables, is enormous. In reference to London, Mr. Colman remarks that—"Fifty years ago, it was calculated there were two thousand acres cultivated by the spade, and eight thousand by spade and plow conjointly. The extent of cultivation must, of course, be at present much greater." * * * "The account given of the product, in a single case, is quite worthy of remark, it being the statement of a market garden. Radishes, £10; cauliflower, £60; cabbages, £30; celery, first crop, £50; second crop, £40; endive, £30; making a total of £220, or 1,100 dollars for the gross produce of an acre in twelve months!!"

THE CROPS, &c.

KENTUCKY.—Extract of a letter to the editor of the Cultivator, dated Frankfort, Sept. 17:—"After some weeks travel through this state, I can safely say that the corn crop of Kentucky is considered to be as good as any they have ever grown heretofore; consequently the number and quality of the stock fattened will equal those of any previous year. You will not be surprised to learn that I had no idea of the prices already offering for hogs, when I tell you the farmers themselves had no such expectations a few weeks since. Hogs are anxiously sought after by the pork packers and their agents, and $3 per 100 lbs. *gross*, (that is weighed up alive,) freely offered, the hogs to be weighed and paid for at the fattening pen when fat, and driven at the risk and expense of the purchaser to the place of packing. Many contracts are now making on these terms, and many farmers refuse contracting, preferring to risk the market when they are fat. From what I know of this business, when a little excitement exists so early in the season, I should not be at all surprised before the season ends that $4 gross will yet be given for some lots of hogs in Kentucky. Pork will certainly be *double* the price, or nearly so, that it was last year to the packer. The best graziers say, they never recollect so many cattle to be fattened in Kentucky as preparations are now making for fattening, and many think they will get $4 per 100 lbs. nett, sinking the offal, but the majority seem to think that the numbers fattened will tend to keep the price at, or below, $3.50 per 100 lbs. It seems too, to be generally admitted that the best beef cannot be packed, with the expectation of profit, for the British market, if it comes at over $3 per 100 lbs. nett to the packer. The hemp crop is extraordinary, far exceeding in quantity and quality the crop of last year. I have gone into several fields where they were cutting, and measured the average height of the stalks, and they exceeded 13 feet in length; the crop is now out and safe in stack, although the wetness of the last few weeks caused the farmers much additional trouble. The tobacco crop is generally admitted to be very fine in quality, and in quantity to be over the average; what I have seen of it fully bears out this remark; but I have not as yet been through the Green River country, which is the great tobacco region of Kentucky, but I have seen men from there who appear very much satisfied with their prospects. This staple is just beginning to be cut now."

CROPS IN ESSEX COUNTY, N. Y.—M. C. BUTLER, of Moriah, writes that the wheat and oat crop of this section was good—corn two-thirds of a crop—potatoes half to two-thirds of a crop—hay less than for some years before.

WESTERN RESERVE, OHIO.—Extract of a letter from from Mr. ALMON THAYER, dated Aurora, Oct. 11:—"The past season has been very dry with us. The hay crop is entirely cut off. As northern Ohio is better adapted to grazing than cultivation, grain is but little grown. Hay is the crop depended on for wintering stock, and a failure of this crop has compelled the farmers of the north to drive their cattle to the southern part of the state to be wintered on corn and corn fodder. The stock is all susceptible of being driven south except calves, which are too feeble to endure a journey of 100 or 150 miles. The farmers in this section are unacquainted with feeding any thing but hay. I would inquire if calves can be successfully wintered on chopped straw and corn-and-cob meal. Corn can be purchased at the south and shipped into this section by canal, at reasonable prices. There is a small quantity of straw and old hay in the hands of most of the farmers, that might be fed to calves, chopped fine, if they would winter well on this kind of feed."

NOTE.—In answer to the above inquiry, we would say, calves can be wintered on corn-and-cob meal, mixed with cut straw, though we should prefer giving some potatoes or turneps with the meal and straw, or instead the roots, some shorts or bran.—ED.

RENSSELAER INSTITUTE.

This Institution was founded by the late Hon. STEPHEN VAN RENSSELAER, in 1824, for the purpose, as expressed in his own language, of "showing the application of science to the common purposes of life," and of qualifying "teachers for instructing the sons and daughters of mechanics in the application of experimental chemistry, philosophy, and natural history, to agriculture, domestic economy, the arts, and manufactures."

Patriotic design of the benevolent founder has been faithfully executed, and the anticipations of its usefulness fully realized. It may be safely affirmed that no institution has rendered greater benefits to the country than this has done by the education of men who have devoted their efforts to the practical application of science.

We had the gratification of attending for one day, the late examination of the students of this Institution. The examination as it was called, was conducted in a manner to us novel. Instead of being carried on by question and answer, it constituted a series of brief, but interesting off-hand lectures by the pupils, on the sciences of Chemistry, Geology, Mineralogy, Animal and Vegetable Physiology, Botany and Meteorology. In all which, a thoroughness of knowledge was evinced that could not fail to convince every spectator of the excellence of the system of instruction here practiced.

The charge of the Institution at the present time is under Professor G. H. COOK, who was a graduate of the school while it was under the supervision of its first teacher, the late Professor Eaton. Besides other and ample evidences of Prof. COOK's qualifications and abilities as a teacher, it is a high recommendation that he was selected by Prof. EATON as his assistant, in which capacity he acted for several years to the entire approbation of all. We believe the reputation of the school is at present fully sustained; and with the advantages of late improvements in the erection of new buildings, new and improved apparatus for chemical and other scientific illustration, with the liberal endowment which it has received from the family of its revered founder and the intelligent and enterprising citizens of Troy, we cannot doubt that it will shortly become one of the most popular, as it is certainly one of the most useful Institutions in the country.

For particulars in regard to the course of instruction, we would refer to the advertisement to be found in this number.

FACTS AND OPINIONS,

Condensed from various Exchange Papers.

OATS.—P. FAY, of Southboro', Mass., says the New England Farmer, had the present season, a ten acre field of oats, yielding about 60 bushels per acre. It was well manured, and sowed at the rate of about 4 bushels per acre.

YELLOWS.—A writer in the Boston Cultivator, states several facts to show that the yellows in peach trees is caused by too free a tillage of the tree, and gives instances where a moderate or slow growth secured the trees from the attacks of this contagious malady. On the contrary, Downing in his work on Fruit Trees, is confident, from many observations, that the yellows is a constitutional disease caused by long continued neglected cultivation, and exhaustion by successive crops. Within our own limited observations, it has attacked trees of all kinds, thrifty and otherwise, and under all circumstances.

ERRORS.—New theories are constantly springing up from single or very limited observations. Among some of the latest are, that nails driven into trees, and holes bored through them, prevent blight and other diseases. A tree becomes diseased—it is accidentally nailed or bored—if not thus greatly injured, it recovers of itself—and a theory is immediately established and pertinaciously adhered to.

DEEP PLOWING.—An English writer, speaking of the prejudice against deep plowing, says, "it would puzzle a conjuror to tell why a farmer always digs his garden 20 inches (where he always gets good crops,) and plows for his field crops only 5 inches."

ASHES AS MANURE.—On the farm of Daniel Webster, according to J. Breck, of the New-England Farmer, on [part of?] a ten acre lot of very light land, 3000 bushels of English turneps were raised last season, with no other manure than leached ashes, at an expense of only seventy-three dollars.

CANKER WORM.—The Indiana Farmer and Gardener, gives a method of excluding this insect. A roll or bat of wool, evenly carded, is applied round the body of the tree and tied tightly with a twine round the middle of the roll. The wool rising on each side, the twine is buried and hid. The worms ascending, encounter the wool, but cannot push through and lay their eggs in it.

PUTNAM RUSSET APPLE.—Dr. Kirtland, in Elliott's Magazine, says that after fifteen years acquaintance with this apple, he does not hesitate to pronounce it the most valuable for extensive cultivation of all late keeping apples, in northern Ohio, where the Newtown Pippin does not flourish. He also states that Shippen's Russet, a different variety, has been widely disseminated under this name.

REVOLVING HORSE RAKE.—It is singular that scarcely an agricultural paper has a correct figure of this implement. A figure, which first appeared, we believe, in some of the Boston publications, and since borrowed or copied all over the country, appears to have been drawn by an artist, who had never seen it in operation. He accordingly represents it as running on *the points* of the teeth, like the old hand rake, a way in which it is perfectly impossible for it ever to work. Why cannot we see a true figure with the teeth *flat* on the ground? As it now is, it is no better than to picture a bull walking on his horns, or a boy sliding down hill on his nose.

THE LOCUST.—A farmer in Western New-York, who is losing a large number of fine locust trees by the borer, wishes to inquire of those in the eastern part, who may have had experience in the matter, whether cutting the injured trees down, at the surface of the ground, and suffering them to sprout up afresh, will not produce good young trees—which would be as likely to escape the borer as young trees set out—and of course with less trouble? A reply from those who may be acquainted with facts, would confer a particular favor.

STEEPING SEEDS.—The New England Farmer describes some experiments on soaking seeds, made this season by J. S. C. Green, of Waltham, Mass. A chemist prepared for him a composition of nitrate, sulphate, and muriate of ammonia, and nitrate of soda and potash. In a solution of these he steeped corn from 17 to 140 hours. When steeped 100 hours, the corn vegetated poorly, but when it remained 140 hours, it did not vegetate at all. Having tried the seed in pots, he determined on 80 hours as the proper time for steeping. He planted a number of strips of three rows each, through a large field of 15 acres, noting the rows on tallies. At the time the editor examined the field the corn was in tassel and the ears well set. The corn which had been soaked exhibited no advantage over the other; on the contrary, if there was any difference, the soaked was not as luxuriant as the unsoaked.

PLOWING MARSH LAND.—The mud being too soft and deep to bear oxen or horses, a rope 14 rods long was attached to the oxen at one end and to the plow at the other, thus enabling the oxen to walk on the hard ground adjoining. A plow was made on purpose, turning furrows 20 inches wide. It had to be drawn back at each furrow. In one part, the upland not admitting of the direct working of the oxen, the rope was made to pass round a wheel or pulley, so that the oxen moved at right angles to the direction of the plow. It was manured with compost and sown with timothy, and produced a fine crop.

PEACH-WORM REPELLED.—George C. Dobson, in the Southern Planter, gives a method of preserving peach and nectarine trees, which has succeeded without any failure. Early in autumn, as soon as the young tree attains its growth for the season, the earth is removed from the root, and half a pint of soft *tar* deposited, and rubbed on the body of the tree for six or eight inches above the surface. The earth is then replaced. This process is repeated early in summer each succeeding year, taking care that the trunk is thus kept coated. An ovipositor would make rather slow headway through a coat of stiff tar.

INFLUENCE OF THE MOON.—A correspondent of an exchange paper, states that a rail fence, laid "in the old of the moon," will sink into the ground from six to ten inches in a short time; but if laid at other times it would not sink; that shingles nailed on the roof of a house "in the new of the moon" soon throw out the nails; that a crop *sown* in the new of the moon, is more affected by that planet, than a crop which *grows* during all other stages of the moon's changes, through several months; and that sheep shear heavier "in the going up of the moon," than otherwise. He might have added that wood *drawn* at the new of the moon would afford twice as many cords as if drawn at other times.

SAVING URINE.—Mr. BRECK, of the New England Farmer, describing Mr. Webster's farm, at Marshfield, says:—"There is no cellar under the barns, but Mr. Webster has hit upon a method to save every drop of liquid manure, and in the best possible way. The planks composing the floors of the cattle's quarters, or byre, as the Scotch call it, are laid with an opening between them of about one-half inch, and so arranged as to be easily taken up. The idea is to place about two feet of loam or other earth, under the floor; this will absorb all the liquid part of the manure as it runs down though the openings, and in the spring will be converted into the finest manure, when it is to be removed and replaced by fresh mold." This is a mode we have seen practiced in many instances, and we think it a very good substitute for a cellar under the barn.

SEED CORN—from the tip kernels of the ear, produced in a distinct experiment, only half as much as kernels selected from the middle of the ear; seed from the buts of the ears yielded about fifteen-sixteenths of those from the middle.

STRAWBERRIES.—In Ohio and Kentucky, single plantations of strawberries often cover many acres. The past season, 235 *bushels* were offered for sale in Cincinnati in one day. The price there is usually three or four cents a quart.

SILK FACTORIES.—There are eight silk factories in Mansfield, Conn., the greatest silk manufacturing town in the country.

THE CULTIVATOR.

ALBANY, NOVEMBER, 1845.

☞ The present volume of the Cultivator will close with the next no. (December,) after which, agreeably to our invariable custom, the paper will be discontinued to all who have not ordered and paid for the next year. We give this notice now, lest it should escape the attention of some of our readers, when given in the December no. We shall send out our Prospectus for the vol. for 1846, with our next no., and shall be greatly obliged to such of our present subscribers as may find it convenient to interest themselves in procuring subscribers for the next year.

TO CORRESPONDENTS.

During the past month, communications have been received from C. C. G., C. H. Tomlinson, E. G. K., Alex. McDonald, D. G. Mitchell, A Subscriber, S. F. Christian, T. H. H., Charles Fox, J. F., Samuel Camp, S. B. Buckley, E. P., E. Smith, Claudius Allen, H. Goodhue, Wm. F. Guernsey, J. H. C., J. P. Norton, G. E. J., S. W. Jewett, R. Parnell.

POTATOE ROT.—We have several communications on this subject, the publication of which we are obliged to decline, as they appear to give but little new light in relation to the malady.

TRANSMUTATION.—We have received a communication signed "A FARMER *of 45 years' practice in Chenango county*," the principal object of which seems to be to ascertain what we would "acknowledge to be showing" that wheat changed to chess. We refer the writer to our last number, page 322, for a plan which we think perfectly fair, and if he will produce chess from wheat according to that plan, or any other which shall amount to positive proof, he shall receive the $50 premium to which he refers. We conceive it can be of no advantage to publish any more *suspicions* of transmutation—when the thing is *proved* the public ought to know it.

C. C. G., Mobile.—You can order the works you want, through your booksellers or merchants, from New-York. The prices are—Downing's Landscape Gardening, $3.50—Cottage Residences, $2.00.

J. A. W., Norfolk.—We know of no work on the subject to which you allude, worth purchasing.

A. H., Lee.—See communication in another part of this paper, for directions for building an Ice-house.

CRICKETS.—H. K. C. wishes to be informed of the best way to destroy house crickets. Who will tell him?

S. F. C., Lexington, Va.—Will reply to your inquiries through the Cultivator, as soon as time will permit.

ALBANY AGRICULTURAL WAREHOUSE.

It will be seen by a notice in the advertising department of this paper, that the editor of Cultivator, has entered into partnership with Mr. ELON COMSTOCK, for the purpose of establishing in this city a warehouse for the sale of Agricultural Implements, Field and Garden Seeds, &c. and in connection with it an agency for the purchase and sale of all the improved breeds of stock. The want of such an establishment, in this city, has long been felt, and a thorough conviction of its necessity and utility alone induced the editor of this paper to become interested in it. It will be conducted under the sole management of Mr. COMSTOCK, a gentleman, it is believed, every way qualified to manage it to public satisfaction. The establishment is but just opened; and consequently is as yet imperfectly filled, but it is the intention of the proprietors, to procure, as fast as circumstances will permit, every variety of machines, implements, and seeds required by farmers and gardeners, and to make the establishment at least equal to any similar one in the Union.

ACKNOWLEDGMENTS.

SAMPLES OF APPLES.—We have received from Mr. J. C. HASTINGS, Clinton, Oneida county, samples of the following varieties of apples: Detroit Red, (or Black Apple;) Lowell, or Orange; English Fall Pearmain; Rutledge. They are each good samples of their kind. The Rutledge is an apple of the first quality. It is just now (Oct. 4,) in a fit state for eating. The English Fall Pearmain is a good sized apple, of fine appearance, and good quality. The Detroit Red, (or Black,) is a very large showy fruit, of pleasant, but not very high flavor.

Mr. C. McCOUN, of Albany county, has also sent us several samples of apples grown on his farm. Among them was a very large apple resembling Pennock's Red Winter, weighing upwards of a pound. There are several other kinds of fine appearance, such as Spitzenburgs, Wine Apple, Lady Apple, and some varieties the names of which we did not recognize.

SEEDLING PEACH.—Mr. DORR, of this city, has left us a specimen of a seedling peach, which appears to us deserving of propagation. It ripens about the first of October, at which season it is difficult to obtain a good, well-flavored peach. It is of good size, and of a quality equal to most of our *good* summer peaches. Mr. Dorr has also several seedling *clings*, well deserving cultivation.

CATAWBA GRAPES.—This fine grape, which is so prolific and attains such perfection in the vicinity of Cincinnati, seldom acquires its full natural flavor here—owing probably to want of sufficient heat. We have just seen, however, in the garden of Dr. MARCH, of this city, some Catawbas of a quality equal to any we remember ever to have met with. They had though, it is proper to say, an advantage of aspect equivalent to several degrees of latitude.

SEEDLING PEAR.—Dr. MARCH has a seedling pear which he keeps well through the winter. He exhibited some of them at our weekly agricultural meetings in the latter part of April last, in fine perfection. It is a good pear and highly deserving propagation. Dr. M. will furnish a few scions for grafting.

Since writing the above we have received from Mr. ELISHA DORR, of this city, some excellent samples of Catawba grapes, grown in his garden on Lydius street. They do full justice to the high reputation of this famous variety.

We have also received from "A SUBSCRIBER" at Brooklyn, Long Island, some splendid bunches of Isabella grapes, in reference to the production of which see an article in this number under the head of "Guano for roses and grape vines." The samples sent are superior to any Isabella grapes we have ever before seen, the bunches being very heavy and the fruit of uncommon size and richness.

☞ We would acknowledge the reception of a barrel of beautiful apples from D. HILL, of Bridport, Vermont. There are several choice kinds—Spitzenburgs, Gilleflowers, Blue Pearmains, Stodards, York Russets, and Fall Pippins, all very large and fair. If such apples as these are produced in the "Green Mountain State," her citizens need not go elsewhere expecting to find better.

OLD CHEESE.—We have received from Messrs. S. & L. HURLBUT and Mr. NORRIS COE, of Winchestea, Connecticut, a couple of cheeses (two years old) manufactured by Mr. Coe, whose dairy was described in our September number, (pages 283, 284.) On trial, they appear fully to sustain the reputation for excellence which Mr. C's cheese has acquired in New-York and the southern cities.

HONEY.—We acknowledge the receipt of a pot of superior honey, from Mr. NATHAN HOWARD of Stephentown. From one swarm of bees placed in his improved bee-house, Mr. H. took four boxes of six pounds each, or twenty-four pounds, in ten days. The article is of the very finest quality.

☞ For editorial notice of Mr. COLMAN'S Tour, Part VI., and several other editorial articles, see pages, 341 2 and 3.

MONTHLY NOTICES.

☞ In our notice of the late State Fair, we inadvertently omitted to refer to the attendance of many distinguished gentlemen from other states. Among them were Dr. Holmes, editor of the Maine Farmer; G. W. Elmendson, editor of the British American Cultivator; M. B. Bateham, editor of the Ohio Cultivator; F. R. Elliett, editor of the Western Reserve Horticultural Magazine; Thomas Affleck, Esq., former editor of the Farmer, at Cincinnati, and now of Mississippi; Mr. Atwood, and Mr. Metcalf, also of Miss.; E. W. Thompson, V. P. Home Dist. Ag. Society, Canada West; Joseph Hartman, delegate from last named society; Franklin Jacques, delegate from the Ag. Society of the Township of York, C. W.; John Torrance, Montreal; John G. Mallock, C. W.; W. N. Hobersham, Georgia; A. S. Cooke, Louisiana; Mr. Felder, of South Carolina; Mr. Haskins, of Maryland; Mr. Gilmour, Baltimore, Md.; Jas. Gowen, Esq., Mount Airy, Pa., who has with a public spirit greatly to be commended, attended the last three exhibitions of the Society, and acted as one of its Judges on improved cattle: J. T. Buckingham, editor of the Boston Courier; Edmund Burke, Commissioner of Patents; Mr. Ballard, of Washington, D. C.; Solon Robinson, of Indiana; Mr. Turner, of Illinois; Dr. Reed, of Washington, Pa.; Judge Smith, and Messrs. Blakesly, Atwood, and Nettleton, of Connecticut; Messrs. Wheeler, Stickney, and others, of Massachusetts: John W. Dana, Mr. Brown, of Ohio; Mr. W. C. Wright, of Vermont, and others.

Sales of Stock.—We lately noticed a couple of fine Durham calves, and some superior Merino sheep designed for the west. The calves, (*Don* and *Dolly,*) are a very promising pair, purchased of Mr. Prentice, of Mount Hope, and are designed for Messrs. George Wolfe and Thomas McGuire, of Keene, Coshocton county, Ohio. The sheep were obtained in part from the noted flock of Mr. J. N. Blakesly, of Watertown, Connecticut, and part from the no less noted flock of Mr. S. W. Jewett, of Weybridge, Vermont. They were designed for Philo Buckingham, of Putnam, Ohio. We trust all these animals will arrive safely at their several places of destination, where we are sure they cannot fail to be highly appreciated.

We learn also that Hon. Daniel Webster, "the Marshfield Farmer," has just purchased of Messrs. Corning & Sotham two heifers, a three-year-old and a two-year-old, of their justly esteemed Hereford herd. They are designed for Mr. W's farm in Massachusetts. We are also informed that Mr. Stetson, of the Astor House, New-York, has purchased a Hereford bull and heifer calf, and a cow from the same herd. For the prices which have been paid for these fine animals, we have no doubt the purchasers will be amply satisfied and recompensed in the real improvement of their stock.

More Heavy Fleeces.—Mr. C. Smith, of Newport, N. Y., writes us that he has lately visited the farm of R. V. R. Horton, of Hubbartton, Rutland county, Vt., and was highly pleased with Mr. H.'s flock of sheep called "Paular Merinos." He says—"they were short legged, large chested, and in all respects superior looking sheep." * * * "Mr. Horton's flock of 100 ewes, sheared 608 lbs. 13 oz. of well-washed wool. One buck, two years old, sheared 12½ lbs., and others from 8 to 11¼ lbs. The wool is fine and excellent." Mr. Smith adds, that "Mr. Horton has labored long and faithfully to bring his sheep to the position they now hold, and for beauty of form, hardiness of constitution, and quantity of fine wool, they are not excelled by any in New-York or New-England."

Mr. Smith, as well as Mr. Horton, are strangers to us, but we give the above statements just as we give others, that is, wholly on the responsibility of the persons making them.

"Many a little makes a mickle"—So says the Scotch adage, and we have just been told a good example of its truth. A butter dealer in this city has been for two years in the habit of saving the *scrapings* of his tubs, and such small portions as unavoidably became damaged by dust, &c., in opening and examining the tubs. The small parcels thus collected he threw into a tub, and when a quantity had been collected, he clarified it by putting it in hot water where the salt settled to the bottom, and the oil was skimmed off the top. In this way he collected enough to answer his purpose for burning as a substitute for lamp oil. It formerly cost him $20 a year for oil and candles for burning; but he has saved butter, such as was formerly wasted, to answer instead—thus making a saving of $40 in two years!

Egyptian, or Emir Barley.—In our October no. we gave a short notice of a grain which was spoken of in the last report of the commissioner of Patents, under this name, and mentioned also that our correspondent W. B. of Lawrens district, S. C. was desirous of obtaining some for sowing.

Mr. John D. Spinner, of Herkimer, has sent us a sample of bald or naked barley, which may be the kind alluded to by Mr. Ellsworth and W. B. At any rate, it is a handsome grain, and weighs, as Mr. Spinner states, sixty pounds to the bushel, and is also said to be very productive. Mr. S. states that in 1844, he sowed four quarts and it yielded four bushels. He says "if it is the kind of grain inquired for, it can be had at a much less price than W. B. offers."

Since writing the above, we have received a letter from Henry Brewer, of Enfield, N. Y., in which he states that he procured some of the "skinless" barley, (supposed to be the "Emir or wheat" barley,) last spring. He sowed half a bushel of it on 72 rods of ground, and the produce was 16 bushels, weighing 58 lbs. per bushel. It was also much injured by drouth and grass-hoppers. He can furnish a few barrels of it delivered at Ithaca. It can be sent by boats on the canal to New-York or Buffalo. He thinks it a valuable kind of grain. It makes, he says, good flour, which is preferred for cakes to buck-wheat.

Prof. Johnston's Agricultural Catechism.—A friend at Rochester informs us that this valuable little work has been adopted as a text book in the public schools of that city, on the recommendation of the Board of Education. "I think it," says the letter of our friend, "a most invaluable work, and if it could be introduced into all the schools in the land, its benefits would be incalculable.

☞ Mr. Hiram Mills will act as Agent for the next vol. of the Cultivator in Lewis county, and we shall be greatly obliged for any assistance our friends may be able to render him in extending the circulation of our paper in that county.

The next State Fair.—Mr. S. Whalen, of Saratoga county, "desires to suggest, through the Cultivator, Saratoga Springs as the place for holding the next State Fair. All things considered, it is a most desirable location. Independent of the numerous health giving fountains, Saratoga abounds with hotels which at the season of the fair are nearly empty. When these are filled, there are almost an untold number of private boarding houses, which with the hotels cannot fail to accomodate the 30,000 or 40,000 that congregate on such occasions." Albany, Troy, Auburn, and Buffalo, have also been named.

Address of Hon. Z. Pratt before the Greene county Ag. Society. We have received a copy of this address, accompanied by a copy of a resolution of the society submitting the paper for publication in the Cultivator. In the great press of matter on hand we are unable to comply with the resolution, which under other circumstances we should be happy to do. The address is marked generally with the sound judgment and practical sense of the author, who in this instance has labored to impress on his fellow-citizens the great advantages which flow from a development of the natural resources of the country. He says—"We have resources and advantages possessed by no other nation; and a people better fitted than any other, to develop those resources and improve those advantages."

Of the means of promoting improvement in agriculture, Mr. Pratt highly commends the formation of agri

cultural societies, and the interchange of intelligence through the medium of agricultural periodicals. He says—"The formation of this, and other like associations, and the variety, and standard worth of our many periodicals which are devoted to Agriculture and the mechanic arts, show the spirit of our people. The benefit which the country receives on account of the free interchange of thought, and general diffusion of intelligence through these channels, is incalculable. An intelligent and well informed gentleman from the south once asserted that through the influence of the Albany Cultivator alone, the wealth of that part of the country had been increased more than two millions of dollars."

TEACHER'S ADVOCATE.—This is a new paper devoted to the cause of education. Its publication was commenced on the first of September last. It appears to be conducted with much energy and talent, and we doubt not is destined to be an important organ in the advancement of the grand cause in which it has engaged. It is published weekly at $2 per year, at Syracuse—edited by Edward Cooper, Esq. We recommend it to the attention and support of the public.

THE RAILROAD JOURNAL.—This valuable Journal is published weekly, 16 pages quarto, by D. K. Minor, 23 Chambers-st., New-York, at $3 per year. It contains extensive tables showing the length, cost, income, dividends, &c., of *most* of the *American and English* RAILROADS and CANALS; also the most recent accounts of important improvements in the construction and management of railroads, and railroad machinery. It will be found useful to *Engineers, Directors, and Stockholders* of Railroads, who should all be familiar, as well with what is passing abroad as at home, in relation to this rapidly advancing cause.

FOREIGN.

We have files of foreign papers to Oct. 2. Accounts concur in the statement of a deficiency of bread-stuffs, both in Great Britain and on the continent. Of the causes of this deficiency, we are not fully informed. The occurrence of wet weather while the harvest was going on, it is stated produced in many districts, great damage. But the very general failure of the potatoe crop, throughout a large portion of Europe, has undoubtedly been the means of greatly enhancing the price of grain. Ordinarily, potatoes constitute the chief support of the peasantry in many parts of those countries, and it is natural that the withdrawal of that great source of sustenance should cause a rise in the value of grain, and perhaps create a demand beyond the ability to supply without recourse to foreign markets. Whether, however, the prospect of a market for our bread-stuffs in Europe is such as to justify the advance which has here taken place, we are unable to decide. The rise in the British markets, (the news of which by the Great Britain steamer created so much stir among our flour and grain dealers,) is said to have been partly the result of "home deficiency and the numerous orders received from Holland and Belgium for the purchase of foreign wheat under lock, for immediate shipment to those countries, where, it is affirmed, a most alarming deficiency is apparent in the potato crop."

The Mark Lane Express observes in relation to the loss of the potato crop: "The extent of the damage caused by the potato disease is alarmingly great. Not only is such the case in almost every locality in England, but it has extended itself into parts of Ireland, Scotland, and the Channel Islands. It is impossible to say where it will end; but we most seriously regret this circumstance, which must affect the poorer classes of society, and entail a vast amount of misery among them. Various remedies have been proposed to stop the disease, none of which have, we fear, been found successful."

In Holland, (as before mentioned,) Denmark, and many parts of France and Germany, this potato malady has during the past season greatly prevailed, and much suffering among the poorer classes of the population is feared in consequence. Speculation in regard to the cause, is still rife, though but little has yet been settled.

One of our latest English papers says—"our best microscopist cryptogamists are divided in opinion as to whether the cause of the calamity is a fungus or not."

DEATH OF EARL SPENCER.—We regret to learn by our late English papers, the death of this devoted friend of agriculture. We believe his death was quite sudden, but we have not the particulars in regard to the cause.

☞The English *Farmer's Herald* is copying from this paper, the communications of our Scottish corrresdent on the Rotation of Crops in the Lothians. The editor introduces the first of the series as follows:—"We are indebted to the *Cultivator*, an American paper, for the following letter, the first of a series upon this most interesting and important subject. Mr. GIRDWOOD, the writer, is evidently well qualified for the task he has undertaken, and we shall have pleasure in making our readers further acquainted with him. To every farmer in Britain or Ireland the excellence of the culture in the Lothians of Scotland has long been familiar as his household gods, at least by reputation. The present series of letters from Mr. Girdwood will show the world how that excellence has been obtained." The same paper, copies Mr. HORSFORD'S 5th Letter on German Farming; and the London *Gardener's Chronicle* of Sept. 27, copies the remarks of Mr. BACON, on the Potato Rot, from our June number.

SHOW OF THE AMERICAN INSTITUTE.

We attended the exhibition of stock, &c., of this institution, which took place at New-York, on the 14th and 15th of last month. In point of numbers and quality, we think the present exhibition was much superior to any former one. The horses were the first which met our attention, of which there was a numerous collection. Among them we particularly noticed *Sir Painter*, owned by Epenetus Howe, of North Salem, Westchester county, N. Y. He is a beautiful thorough bred animal, evidently possessing great power and courage. We also noticed several other fine horses, particularly *Florizel*, owned by Mr. Crosby, of Watervliet, and others, whose owners' names we did not learn.

There were several pairs of very large, strong mules, shown. We noticed several which we thought were over 15 hands high. There was also a pair which were perfectly white, a very unusual color for this animal.

Of cattle, there were several fine Durham bulls, and a few good cows. The principal competitors were Messrs. Bell & Morris, Woolsey and Dr. Poole, of New-Jersey. The letter gentleman also exhibited some very pretty full blood Alderney cows. There were several very fine Devons, belonging to Mr. Colt, of New-Jersey. Mr. Blakesly, and we think some others, from Connecticut, also showed some good Devon bulls.

In the sheep department the show was very good—in the long wooled breeds it was indeed quite superior, both in numbers and quality. Among the competitors in this class we noticed Messrs. Hallock, McIntyre, and Bathgate, all having excellent stock. The South Downs were not numerous, though we noticed a few good ones.

Excellent Merinos were exhibited by Messrs. Jewett, of Vt., and Blakesly of Ct., and some, a cross of Saxon and Merino, by Mr. Smith, of Ct., which attracted much attention.

There was a considerable assortment of poultry, the most curious of which were a pair of *snow-white* Guinea fowls, offered by S. F. Jones, of New Brighton. They were perfect *albinos*, having been bred from the ordinary grey-spotted species. The same person showed also, some immense Java fowls, and capons from the Bucks county breed.

The mechanical, horticultural, and floral department of the exhibition, we had not time to examine with the attention requisite to obtain a just idea of it. It was however acknowledged to be superior to any previous show, and may be pronounced a splendid affair. We glanced for a few moments at the implements, &c., a patent brick moulder, by A. Hall, Coxackie, N. Y.; a horse-power by Mr. Burrall, of Geneva; a superior cooking closet, by J. Grimes, New-York; a shower bath, (very convenient,) by John Locke, New-York, and an excellent water filter.

DOWNING'S FRUIT AND FRUIT TREES OF AMERICA.

We have already given our opinion on the high merits of this work, and have made a few extracts as specimens of what it contains, to which we here add a few; our readers will however remember that such small portions can afford at best but a very inadequate knowledge of a well arranged and copiously enriched whole; and the book itself must be had by all who would receive the benefit of the inexhaustible fund of information it contains.

Much interest has been excited relative to the efficacy of *salt* as a preventive of the *curculio*. The author's experience is given in the following statements:

"Insects, the larvæ or grubs of which harbor in the ground during a certain season, as the curculio or plum weevil, are all more or less affected by the application of common salt as a top dressing. On a larger scale—in farm crops—the ravages of the cut-worm are frequently prevented by sowing three bushels of salt to the acre, and we have seen it applied to all kinds of fruit grounds with equal success. Salt seems to be strongly disagreeable to nearly all this class of insects, and the grubs perish even where a small quantity has for two or three seasons been applied to the soil. In a neighborhood where the peach worm usually destroys half the peach trees, and where whole crops of the plum are equally a victim to the plum weevil, we have seen the former preserved in the healthiest condition, by an annual application of a small handful of coarse salt about the collar of the tree at the surface of the ground; and the latter made to hold abundant crops, by a top dressing applied every spring, of packing salt at the rate of a quart to the surface occupied by the roots of every full grown tree." p. 53.

"Common salt we have found one of the best fertilizers of the plum tree. It not only greatly promotes its health and luxuriance, but from the dislike which most insects have to this substance, it drives away or destroys most of those to which the plum is liable. The most successful plum grower in our neighborhood, applies, with the best results, half a peck of coarse salt to the surface of the ground under each bearing tree, annually, about the first of April." (p. 266.) Those who have tried salt the present season, in the western part of the state, speak of its effects as very decidedly beneficial in saving the plum crop.

On the subject of *repelling insects by odors*, the following remarks will doubtless be very useful to many:

"In the winged state, most small insects may be either driven away by powerful odors, or killed by strong decoctions of tobacco, or a wash of diluted whale oil or other strong soap. Attention has but recently been called to the repugnance of all insects, to strong odors, and there is but little doubt that before a long time, it will lead to the discovery of the means of preventing the attacks of most insects by means of strong-smelling liquids or odorous substances. The moths that attack furs, as every one knows, are driven away by pepper-corns or tobacco, and should future experiments prove that at certain seasons, when our trees are most likely to be attacked by insects, we may expel them by hanging bottles or rags filled with strong-smelling liquids in our trees, it will certainly be a very simple and easy way of ridding ourselves of them. The brown scale, a troublesome enemy of the orange tree, it is stated in the *Gardener's Chronicle*, has been destroyed by hanging plants of the common chamomile among its branches. The odor of the coal tar of gas works is exceedingly offensive to some insects injurious to fruits, and it has been found to drive away the wire worm, and other grubs that attack the roots of plants. The vapor of oil of turpentine is fatal to wasps, and that of tobacco smoke to the green fly." (p. 54.)

"*Moths and other insects which fly at night*, are destroyed in large numbers by the following mode, first discovered by Victor Adouin, of France. A flat saucer or or vessel is placed on the ground, in which is placed a light, partially covered with a common bell glass besmeared with oil. All the small moths are directly attracted by the light, fly towards it, and in their attempts to get at the light, are either caught by the glutinous sides of the bell glass, or fall into the basin of oil beneath, and in either case soon perish. M. Adouin applied this to the destruction of the *pyralis*, a moth that is very troublesome in the French vineyards; with two hundred of these lights in a vineyard of four acres, and in a single night, 30,000 moths were killed, and found dead on and about the vessels. By continuing this process through the season, it was estimated that he had destroyed female moths sufficient to have produced progeny of over a million of caterpillars." (p. 55.) After recommending bonfires of shavings, and flambeaux of tow dipped in tar, as very efficient modes of destroying the apple-worm moth, and melon-bug, the author remarks, "A simple and most effectual mode of ridding the fruit garden of insects of every description, which we recommend as a general extirpator, is the following. Take a number of common bottles, the wider-mouthed the better, and fill them about half full of a mixture of water, molasses, and vinegar. Suspend these among the branches of trees, and in various parts of the garden. In a fortnight they will be found full of dead insects, of every description not too large to enter the bottles—wasps, flies, beetles, slugs, grubs, and a great variety of others. The bottles must now be emptied, and the liquid renewed. A zealous amateur of our acquaintance caught last season in this way, *more than three bushels* of insects of various kinds; and what is more satisfactory, preserved his garden almost entirely against their attacks in any shape."

Some interesting and striking instances are occasionally given of the productiveness of single trees, and of the profits of fruit culture:—

"Although the apple generally forms a tree of medium growth, there are many specimens in this country of enormous size. Among others we recollect two in the grounds of Mr. Hall, of Raynham, Rhode Island, which, ten years ago, were 130 years old; the trunk of one of these trees then measured, at one foot from the ground, thirteen feet two inches, [in circumference,] and the other twelve feet two inches. The trees bore that season about thirty or forty bushels, but in the year 1780 they together bore one hundred and one bushels of apples. In Duxbury, Plymouth county, Mass., is a tree which in its girth measures twelve feet five inches, and which has yielded in a single season, 121¼ bushels." (p. 57.)

"There are [pear] trees on record abroad, of great size and age for fruit trees. M. Bosc mentions several which are known to be near 400 years old. There is a very extraordinary tree in Home Lacy, Herefordshire, England—a perry pear—from which were made more than once, 15 hogsheads of perry in a single year. In 1805 it covered more than half an acre of land, the branches bending down and taking root, and in turn producing others in the same way. Loudon, in his recent work on trees, says it is still in fine health, though reduced in size.

"One of the most remarkable pear trees in this country, is growing in Illinois, about ten miles north of Vincennes. It is not believed to be more than forty years old, having been planted by Mrs. Ochletree. The girth of its trunk, one foot above the ground, is *ten feet*, and at nine feet from the ground, *six and a half feet*; and its branches extend over an area sixty-nine feet in diameter. In 1834, it yielded 184 bushels of pears; in 1840, it yielded 140 bushels. Another famous specimen, perhaps the oldest in the country, is the *Stuyvesant pear* tree, originally planted by the old governor of the Dutch Colony of New-York, more than two hundred years ago, and still standing in fine vigor, on what was once his farm, but is now the upper part of the city, quite thickly covered with houses."*

The great profits sometimes derived from the sale of fruit of well selected varieties, are evident from a single fact in relation to the *Frost Gage*, a fine late plum,

* This old tree standing at the corner of 3d Avenue, and 13th street, is evidently on the decline, as it now appears less vigorous than it did a few years ago, hard pavements evidently being less favorable than cultivated soil. A few rods from this tree, is a *cherry* tree, also planted by old governor Stuyvesant, now in the garden of Robert I. Murray, of 14th-street, which annually yields heavy crops.—*Ed.*

which commands from two to five dollars a bushel in market:—

"Eighteen hundred dollars have been received by a single farmer in this vicinity, for a single season's crop of this plum." (p. 300.)

The frauds of dishonest nurserymen are occasionally mentioned; an instance of which is given by the notice of the "Tobacco-leaved cherry," sold under the imposing name of "*Four to the pound*," which would make the cherries about twice the size of common hen's eggs. The leaves of this variety are very large and coarse, and thus well calculated to facilitate the fraud, but the fruit is very small; hard-fleshed, with a large stone, and of inferior flavor.

Under the description of the Monarch pear, considered by T. A. Knight with whom it originated, as superior to all others, are the following remarks:—

"By some unlucky error, Mr. Knight transmitted to this country, and disseminated partially in England, several years ago, grafts of a worthless sort, for this fine pear, which in no way resembled it. The false sort was pretty largely propagated and distributed before the error was discovered." * * * "Mr. Knight was deeply mortified at this accidental error, and is said to have remarked, that he would gladly have sacrificed £10,000 rather than it should have occurred. Would that some nurserymen were as conscientious!" And hence the importance of propagating for sale or general distribution such fruits only as have been well proved from bearing trees, without depending merely on the authority of others.

In another place the author truly remarks, "Some nurserymen here, we regret to say, do not scruple to fill large catalogues with the names of varieties which have no corresponding existence in their grounds."

Those who have largely disseminated the numerous foreign pears lately introduced in our country, before a thorough trial of their qualities and fitness for the climate, should receive a caution from the following fact:

"The most successful cultivator of pears in this country, whose collection comprises hundreds of varieties, lately assured us that if he were asked to name all the sorts that he considered of *unvarying and unquestionable excellence* in all respects, he could not count more than *twenty!*" The author very justly adds, however, "It may then be asked, why do all cultivate so large a variety. We answer, because the quality of many is yet not fully decided; again, there is a great difference in taste, as to the merits of a given sort; there are also some sorts so productive or handsome, &c., that they are highly esteemed, though only second rate. In a work like the present, we are also obliged to describe many sorts of second quality, in order to assist in identifying them, as they are already in general cultivation."

In ripening winter pears, some care and skill are required. A want of this has induced some cultivators to reject as worthless some truly fine varieties. The following directions are given:—

"Winter dessert pears should be allowed to hang on the tree as long as possible, until the nights become frosty. They should then be wrapped separately in paper, packed in *kegs, barrels, or small boxes*, and placed in a cool, dry room, free from frost. Some varieties, as the D'Aremberg, will ripen freely with no other care than placing them in barrels in the cellar, like apples. But most kinds of the finer winter dessert pears should be brought into a warm apartment for a couple of weeks before the usual season of maturity. They should be kept covered, to prevent shrivelling. Many sorts that are comparatively tough if ripened in a cold apartment, become very melting, buttery, and juicy, when allowed to mature in a room, kept at the temperature of 60 or 70 degrees."

Bone Manure.—R. M. Bailey says in the American Agriculturist, that some of the most extensive farmers of Long Island, use annually from 500 to 1000 bushels of ground bones on their lands, applying it at the rate of 35 to 56 bushels per acre; and that some of the poorest farms have thus been made fertile and productive, within the last fifteen years.

FARM OF J. F. SHEAFE.

In August last we had the pleasure of making a call at this fine farm, which is called High Cliff, and is situated in the town of Poughkeepsie. It appears that it has received the first premium from the Dutchess county Agricultural Society as the best cultivated farm in the county. We are not surprised at this, for though our examination of it was necessarily hasty, we could not fail to observe the evidences of good management which are so conspicuous. The following extract from the report of the committee which awarded the premium referred to, will give a more just view of the farm than we are able to furnish from our hasty visit. We would call particular attention to the *exactness* with which all the operations on Mr. Sheafe's farm are recorded—a plan which we wish might be generally adopted.

The committee through their chairman, cannot let the opportunity pass of expressing their pleasure and approbation of the high state of cultivation, and many improvements they witnessed on this farm. It consists of 230 acres, divided into 13 lots by substantial stone walls, with lanes leading to each lot, and gates hung in the most substantial manner; all the hedgerows, elders, &c., along the fences, carefully extirpated, and no weeds to be seen; all the loose stones carefully picked up and laid in walls; the land appeared to be in a high state of cultivation, and well seeded and manured. Lime has been used with good effect as a manure, also horn shavings, muck, barn-yard manure, &c.

"The farm buildings were in excellent order, and could not but excite the admiration of the committee. The cow stables, are excellently arranged, the name of each cow being placed over her separate stall, where she can enjoy her food without being annoyed by her neighbors, and she being sheltered from the storms of winter, and being carefully bedded with straw, the manure is saved from being leeched by rains. The committee would recommend the stabling of cattle to all farmers, (the stables can be made less expensive than these) as a great saving of fodder, manure, &c., adds to the comfort of the cattle, and they believe in a very short time would repay the farmer for the expense of a shed.

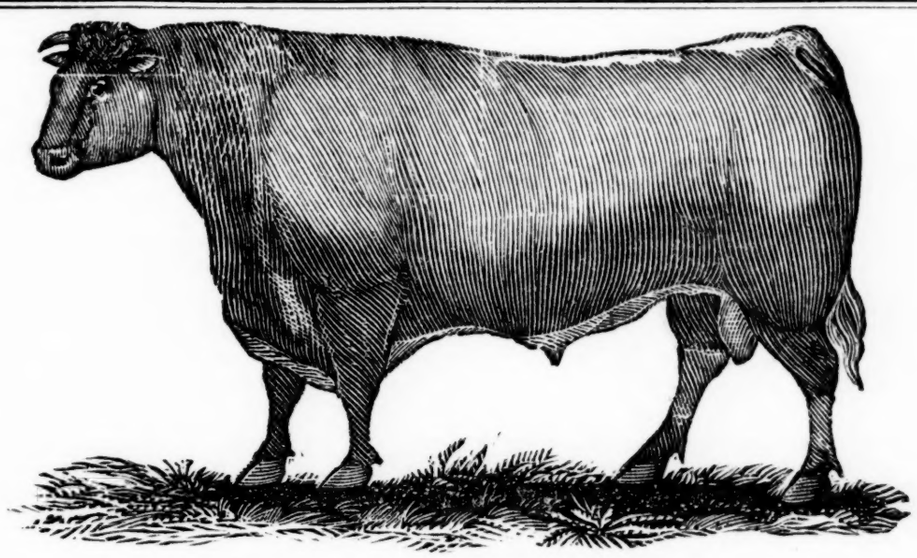
"The barns and sheds appear to be very conveniently arranged, being placed on the side of a knoll, and the hay, &c., pitched in the windows of the sheds.

"Mr. Sheafe has been erecting a superior hay press which appeared to be made in the most substantial manner. He has also an office erected near his farm buildings, where his farmer keeps a set of books, being a journal of every day's work, the expense of every field and crop; the age, pedigree, &c., of all the stock. In the office is a platform scale to weigh every thing necessary; also a map of the farm, containing the quantity of land in each field, each lot being numbered and surveyed. Indeed the old adage, "a place for everything, and every thing in its place," appeared to be verified here. The piggery also appeared well adapted to its purpose, well filled with old and young porkers. The farm house and dairy cellar appeared excellent and well arranged.

"The Committee were shown some beautiful farming implements, among them a subsoil plow to break up the hard pan in heavy land, following the common plow, also other plows. All of them appeared well adapted for the work to be done—a plaster sower; straw and root cutter, &c.

"This farm is used principally for grazing. The Committee were shown a beautiful herd of improved short horns, well adapted either for the dairy or the shambles; also a flock of Southdown sheep. It would take too much time to mention everything worthy of note. This farm has been under the management of Mr. James H. Lawson, for a number of years, and too much credit cannot be awarded him for the skill and judgment shown in everything appertaining to the farm."

Birds *vs.* Insects.—The north of France is distinguished by a deficiency of trees and hedge-rows and affords consequently but little shelter for birds. The effect is as obvious as it is injurious, and destructive insects, unchecked by their natural enemies, commit extensive ravages.



FORTUNATUS, *alias* HOLDERNESS—(Fig. 96.)

A Short-Horn bull imported by GORHAM PARSONS, ESQ., *of Massachusetts, in* 1818.

LIVE STOCK IN CONNECTICUT.—(*Continued.*)

EAST-WINDSOR, as we have mentioned, was noted at an early period for the excellence of its cattle. The first time we were ever in Boston, we recollect having seen at the Columbian Museum, the stuffed skin of "The Great Connecticut Ox." This ox, as we are informed by Henry Watson, Esq., was bred by Mr. Elizur Wolcott, of East Windsor, and sold about the year 1809. His weight, when slaughtered, was 2,133 pounds. Mr. Watson thinks this ox was descended from a bull introduced here by Mr. Samuel Wolcott, previous to 1790. Many other animals quite as remarkable as this ox, were bred in this town more than thirty years ago.

In 1827, Mr. John Watson purchased of Col. Jaques, of Massachusetts, a short-horned bull called *Holderness*. Mr. W. had kept him one year previous to the purchase. This animal, under the name of *Fortunatus*, was imported by the late Gorham Parsons, Esq. of Massachusetts, in November, 1818. He was a bull of considerable celebrity in Massachusetts and Connecticut for several years. In 1819 he received from the Massachusetts Society for Promoting Agriculture, the premium of *one hundred dollars* as the best imported bull at the society's show at Brighton that year. From a letter we received from Mr. Parsons several years ago, we learn that Holderness was bred at North Allerton, Yorkshire, (Eng.,) by George Faulkner, Esq., of whom he was purchased by Mr. P.'s agent, who was directed to obtain the best stock to be had. In a hand-bill issued in 1820, he is described as follows:—"His color is bright chestnut, skin yellow, horns uncommonly light and finely curved." There is no doubt that he belonged to the best variety of what were called in that day, the "Teeswater" cattle. His progeny were generally hardy, thrifty, and excellent milkers, often carrying prizes at the Massachusetts state and county shows as well as the shows in Connecticut. The quality of his flesh was not probably as good as that of some animals, though his progeny from common cows were not generally complained of in this respect.

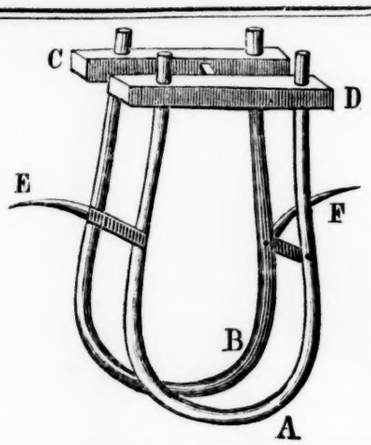
The figure at the head of this article was copied from one taken of Holderness in 1828. With the exception of the neck, which is represented with somewhat less dewlap than belonged to the animal, it is said by those who remember him, to give a very good outline of his leading characteristics.

The Short-Horns of the district of Holderness, Yorkshire, had long since the reputation of great milkers, and it was probably this circumstance that induced Mr. Parsons to substitute for this bull the name of Holderness for that of Fortunatus. The result, however, was doubtless injurious to the reputation of the bull and his progeny. Among those acquainted with the history and characteristics of the old Holderness breed, the idea was at once received that the animal was of this race, which Lawrence describes as one "of the worst shaped and least profitable. * * * Slow feeders, never fat, and the flesh excessively coarse." These characteristics would be by no means generally applicable to Mr. Parsons' bull and his stock.

Mr. Samuel Bartlett, (lately deceased,) of East-Windsor, bred and fatted a pair of oxen got by Holderness, which he sold on the foot, in Wilbraham, Mass., on the 17th of November, 1833, they being then seven years and eight months old. Their live weight at this time, as certified by a sworn surveyor, was individually 3,740, and 3,709—total 7,449. Mr Bartlett informed us that the dressed weight of these cattle was rising 5,200 lbs. Mr. Bartlett showed us on his fine farm, (a pattern of good management,) several superior milch cows which have more or less of the blood of Holderness. We likewise saw several of the same blood in the neighborhood, one of which, a half-blood Holderness, had the appearance of an extraordinary milker, and was said to have made fourteen pounds of butter per week, fed on grass only. A son of Mr. Bartlett has some full blood Durhams. We saw a cow and a pair of steers which look well. Mr. John Bissell showed us several good cows, a pair of very large, strong oxen, and some thrifty steers.

Henry Watson, Esq., has quite a herd of full blood Durhams. He has been in possession of this stock almost from the introduction of the breed into the country. He first purchased some full bloods of Stephen Williams, Esq., of Northborough, Mass., (the owner of Young Denton,) which were afterwards crossed with Wye Comet, purchased by Mr. Watson of Col. Powell, of Philadelphia. Since then he purchased some cows of the late Hon. Stephen Van Rensselaer, of this city. He has likewise several of the progeny and descendants of the fine Durham stock imported in 1830 by Enoch Silsby, Esq., of Massachusetts. He has used high bred bulls of various families. Several of his cows show fine points, and have the appearance of being capital milkers. His Young Agatha, a calf of Mr. Silsby's imported Agatha, is a cow of great substance, good symmetry, and Mr. Watson assures us, is the best milker he ever owned. Taking her in all respects, she is a superior cow, even among the *famed ones* of the celebrated breed to which she belongs.

At the farm of Orren Thompson, Esq., principal of the Thompsonville Manufacturing company, we saw the bull *Sir Dick*, and two cows, imported by Mr. T. a year or two since. The cows were very large, and were said to have been selected in England on account of their great milking qualities. They were, however, very thin in flesh when we saw them, being evidently too large for the thin soil and short pasture of that section.



REMEDY FOR COWS SUCKING THEMSELVES.—(Fig. 97.

A subscriber inquires for a plan to prevent cows from sucking themselves. We give the above cut and the following description, as the best plan we have met with. It was furnished for the Cultivator by R. North, Jr., of Berlin, Conn., in 1842.

Description.—A and B, in the cut, represent two ox-bows, of a size suitable for the animal for which it is intended. The bow marked B, should be a little the largest, corresponding with he size of the neck at the shoulders. C and D, represent the yoke or neck piece. It is formed of two pieces of wood of a size say 1½ by 2½ inches and framed together by means of a cross piece, which gives it the appearance of the letter H. In this yoke are bored four holes of the size of the bows, and at such distance apart as would best receive them. Across the bows, midway from the bottom to the neck piece, are riveted two pieces of iron marked E. and F. These pieces have a spiral termination. They should be bent out somewhat, lest they unnecessarily pierce the sides of the animal.

FATTENING ANIMALS.

It should be made a primary object to fatten animals intended for slaughter as rapidly as possible, if we wish to obtain the greatest quantity of meat in proportion to the food consumed. The reason is this: It takes a certain amount of food, daily, to support life, or to supply the natural waste of the body. For instance, suppose fifteen bushels of meal and five hundred pounds of hay will bring an animal to a certain degree of fatness in forty days; that is, allowing a peck and a half of meal and twelve and a half pounds of hay to be consumed daily. Now suppose it takes a fourth part of this daily allowance to sustain life and supply the waste of the body; then, if instead of feeding out our whole quantity of food in *forty* days, we prolong the time to an *hundred and sixty* days, the food would be wasted, and the trouble and labor of feeding expended for nothing; as the animal might be in worse condition at the expiration of that time than when we began feeding.

This is a matter which has been too little regarded, and as a consequence, there has been a useless expenditure of food and labor. In the animal economy, the accumulation of fat and extra flesh, is only a deposit of superfluous nutriment, which not being required by the system at one time, is laid by for future emergencies; and it must be obvious that the larger the quantity of food which a fattening animal can be made to consume daily, with a good appetite, or to digest thoroughly, the greater will be the amount of flesh and fat gained in proportion to the whole quantity of food consumed.

Another essential point in fattening animals, is to keep them in a quiet and comfortable condition. We do not propose to engage at present in a consideration of the relative action of the different organs of the animal body. Every farmer has, however, more or less noticed the connection which the nervous system has with the digestive and secretive organs. An animal may consume a large amount of food, but if it is so situated that it is restless and discontented, the accumulation of fat will be only at a slow and unprofitable rate. We have seen hogs and cattle intended for slaughter, rendered so entirely uncomfortable from the coldness and filthiness of their situation, that they scarcely throve at all, though they consumed and wasted much more food than they would have required if properly cared for. Hence the saying, that "an animal will fret off flesh faster than it can be gained."

Animals should not be confined to wet and muddy places—above all things they should not be obliged to take their food in such places. Cattle and sheep that are fed with grain and vegetables, should be provided with clean mangers. Fatting hogs should be fed in clean troughs, or on clean dry floors, and their sleeping places should be dry and sufficiently warm. They should not be expected to perform much labor in the compost-yard; that service should be rendered while they are in working trim, and not after they are full fed and are becoming overloaded with fat. All exertion is attended with a waste of muscular tissue, and the more laborious the exertion, the greater is the expenditure. Hence the increase in weight will be most rapid by allowing the animal to remain as much at rest as is consistent with the preservation of its health.

Substances in which the nutriment is much concentrated, should be fed with care. There is danger, especially when the animal is first put to feed, that more may be eaten at once than the digestive organs can manage. Meal of Indian corn is highly nutritive, and when properly fed causes animals to fatten faster than almost any other food. They will not, however, bear to be exclusively kept on this article for a great length of time. Meal made from the heaviest varieties of corn, especially that from the hard flinty kinds grown in the northern and eastern states, is quite too strong food for cattle, sheep, or horses, to be full-fed upon. Hence one of the advantages of having the cob ground with the corn, by which the nutriment is diffused through a greater bulk, lays lighter in the stomach, and is more thoroughly digested. The effect of pure corn meal on animals, we suppose to be similar to that sometimes produced on our own species by the use of fine wheaten flour—the subject becomes *dyspeptic*, and is forced to use bread which has the bran mixed with the flour. The mixture of the cob with the meal, answers the purpose of the bran—the health of the animal is preserved and the process of digestion goes on uninterruptedly. In fact the advantages of grinding the cob and corn together for feeding cattle may be said to be well established. For hogs, the benefit of the cob, is not, we think, so evident; those animals appearing to be better adapted for taking their nourishment in a concentrated form, than those which ruminate, or chew the cud. Yet food sufficiently bulky to effect the distention of the bowels is necessary for hogs.

Hay or straw, cut into lengths so short as to be readily mixed with meal, answers a good purpose in rendering the meal easy of digestion, and in enabling the animal to extract from it all the nutriment.

Much has been said on *cooking* food for stock, and it seems to have been pretty well settled that for hogs, it is attended with considerable advantages, but as regards cattle, we are yet without any reliable experiments made in this country. The Highland Society of Scotland, instituted a series of experiments a few years ago, with a view of ascertaining the advantage, if any, of cooking different kinds of food for different species of animals. The conclusion arrived at from the result of these experiments, was, that the superiority of cooked over uncooked food for *cattle* is but trifling, and not sufficient to balance the cost; but for hogs, the extra cost of preparation was repaid. The articles tried were turneps, potatoes, barley, and oatmeal, oil-cake and flax seed. We do not advert to these experiments as altogether conclusive, though as before said, we could not advise the outlay of much expense for cooking food for cattle, till some additional light shall indicate its advantages.

The appetite and health of animals are promoted by giving a variety of food. This fact has led to the preparation of compounds for fattening stock. An article called "Warnes' Compound," (see last vol. Cultivator p. 373, 374,) is much esteemed by British farmers, for fattening

cattle. For fattening hogs, we have used with advantage the following mixtures. 1. Two parts potatoes and two parts pumpkins; boil together till they can be easily mashed fine—then add one part meal, stirring and mixing intimately together. The heat of the potatoes and pumpkins will scald or cook the meal, and when cold the mixture will be a stiff pudding. 2. Two parts potatoes, and two of ripe, palatable apples, (either sweet or sour;) boil till they can be mashed fine—then add one part meal, (either that from corn, barley, or oats and peas, allowing the same weights.) and mix together while the potatoes and apples are hot.

Hogs seem more fond of this food when it has slightly fermented, (not become pungently sour,) and they appear to fatten faster if it is fed in this state. We have never seen hogs thrive faster than when fed on these mixtures, with occasionally a little dairy-slop, and we have always found the pork solid and of good quality.

In regard to the relative value, compared with grain, of different kinds of vegetables for feeding stock, there is, perhaps, more diversity of opinion than on almost any other branch of husbandry. Some, for instance, believe that four bushels of potatoes are equivalent to one bushel of corn meal; others think potatoes should be reckoned higher; others again hold them less valuable, while some declare that stock will scarcely fatten at all on potatoes, and that for milch cows, if they increase the quantity, they injure the quality of the milk. It is not easy to understand fully the cause of such contrary opinions; but there is no doubt that it may be considered partly attributable to the different degrees of nutriment which the same kinds of vegetables possess when grown on different soils, and under different circumstances, and partly to the different systems observed in feeding. According to some chemical analyses, turneps and other vegetables contain considerably more nutriment when grown on some soils, or by the aid of some manures, than when produced on other soils. Potatoes produced in soils deficient in carbonaceous matter, are acknowledged to be less nutritive than others.

But probably the principal cause of vegetables having been undervalued for animals, is their having been used in an improper manner. Boussingault and his associates restricted the food of certain animals to potatoes, turneps, mangel wurtzel, and carrots, and from the result of this experiment, inferred that these vegetables would not fatten swine or cattle—that they reduced the flesh of milch cows, and made the milk poorer—and that all the butyraceous particles the milk contained came from the fat previously deposited in the system.

Without attempting to discuss this matter in detail, we would remark that to a *practical* man, accustomed to feeding animals with vegetables, these results, though at variance with others, would not appear strange. It is well known that graminiverous animals require food of a fibrous nature, and that an essential function of some species, rumination, cannot be carried on without it. It is also known that the articles alluded to have, when fed by themselves, a laxative or cathartic action; and thus for various reasons, we see the necessity of feeding straw or hay with vegetables, in order to enable the animal to derive full benefit from them. In the experiment of Boussingault, the animals, it should be remembered, were confined to the vegetables, without any fibrous or absorbing substances to check the tendency to purgation, and keep the food in the intestines in such a state, and for such a length of time, that the nutritive particles could be assimilated. If the animals had been fed wholly on corn meal or wheat flour instead of potatoes and turneps, the effects would not, probably, have been precisely similar, but no practical farmer would expect stock to thrive or continue healthy for any considerable length of time on either of these substances. And yet we do not see why it might not with as much propriety be argued from a failure to fatten stock on meal and flour, that it was owing to a deficiency of nutriment in these articles, as that the failure in the former case was attributable to this cause.

Preparations should be made for winter as soon ss possible.

DISEASE IN THE POTATO.

With the exception of the state of Maine and the British Provinces of New Brunswick and Nova Scotia, we think the potato crop has not this year been as much injured in this country by what is called *rot*, as it was in either of the two years last preceding the present. In Europe, however, the ravages of the disease have been more extensive than ever before. The foreign journals teem with accounts from all quarters of the injury suffered and with various conjectures and theories as to to the nature of the cause and remedy

The Edinburgh Quarterly Journal publishes a letter from Professor Johnston in which he makes the following remarks:—

"This disease in the potatoe has already called forth many hasty opinions, almost all partially true, because founded on one or two facts, but nearly all unsound as general expressions of the truth, since they are contradicted by the experience of other practical men in other districts of the country. We are clearly unable as yet, to assign either any general cause for the disease or any universal remedy. Something may possibly be suggested by the analysis of sound and diseased potatoes, for which the Highland Society has offered a premium, though, in the present state of our knowledge upon the subject, even this is doubtful. The most that chemistry has yet done for this question is in the shape of suggestions for experiment."

The Buffalo *Pilot* furnishes a translation of a paper originally prepared by Prof. Chas. Morren, of the University of Liege. He conjectures that the disease proceeds from a description of mold or fungus. It may be said that this theory has the appearance of plausibility, as the blight or blast in grain, has been pretty clearly traced to a fungus; the spread and increase of which is however, greatly dependent on the weather, heat and moisture, or a damp sultry atmosphere, favoring its propagation. But until something more shall have been actually proved by experiment or practice in regard to the prevention of the difficulty complained of, we do not think it necessary to occupy much space in giving theories in reference to the cause of the disease or its remedy. We give place notwithstanding to the following extract from Prof. Morren's paper, which we are sure will at least be read with interest:

"For some time I have been in the daily habit of observing from stage to stage, the progress of the disease in various fields of potatoes. It commences unquestionably, with the leaves and superior parts of the plants. I have even observed the flowers and balls first attacked. A part of the tissue becomes unhealthy, loses its color, and changes rapidly to yellow; the spots then become gray, and within a day or two subsequently, the under side of the leaf and fruit will show a sort of white down or mold. The microscope shows that this down proceeds from a sort of fungus, that fructifies upon the pile, or beard, that thickly covers the under side of the leaf of the potato plant.

"This fungus is of an extreme tenuity; but reproduces in an incredible measure. Its trunk is composed of several erect, jointed fibres, bearing at their summits one or more branches, always double, and at the ends of which appear the reproductive bodies, in the form of an egg, but which do not really exceed in diameter the one hundredth part of a millimetre, or the 393,700 part of an inch. Perhaps it will be said that this is a small affair to make such ravages, but I would ask is the itch a disease less to be feared, because the animals producing it exist only in a microscopic state?

"Immediately following the formation of the yellow spot, and the developments of the *botrydis* upon the potato leaf, the stem begins to feel the deleterious influence. Here and there the epidermis begins to turn brown, and finally black; and when the phases of the disease are carefully watched, through the microscope, it will be readily perceived that it is in the bark the fatal germ exists. The morbid agent communicates its action from the bark to the inner epidermis, and although this latter does not always show the fungus itself, yet it is no the less fatally affected. To those who have any idea o

vegetable physiology, these effects are easily enough explained. The sap, modified into living juices, into vegetable blood, is formed in the leaf, and descends to the stem and roots, through the bark. Here this sap, or blood, if we please, becomes diseased, and carries the poison of the leaf through the fibres of the whole plant, and the stalk perishes. In fine, so soon as the black spots appear upon the stalks, the leaves dry up and wither, the plant droops, dies and falls to the earth, to disseminate a million fold, the poisonous canker."

ORIGIN OF THE MORGAN HORSE.

Mr. WEISSINGER, one of the editors of the Louisville (Ky.,) Journal, has lately made a tour through the northern and eastern states, and while in Vermont took pains to examine the best horses, and to learn all particulars relative to the breed and mode of management. In relation to the origin of the celebrated Morgan horses he has, however, given a statement, said to have been furnished by Mr. Cotterel, of Montpelier, which we cannot but think is at variance with well established facts. To give a full understanding of the case, we herewith copy the statement of Mr. Cotterel, as given in Mr. Weissinger's letter published in the Journal, and then offer counter testimony:

"Mr. Cotterel, of this place, [Montpelier,] who is as well acquainted with horses as any man in Vermont, says there is not the slightest doubt that the original Morgan was got by a Canada horse. He says the most probable account of his origin is this. A man by the name of Smith, at Plainfield, N. H., had a fine imported mare. He rode this mare to Canada on a courting expedition, and while there his mare got in foal. Smith regretted the accident, and laying no value upon the colt, he sold it to Morgan, a singing master, who, when the colt was grown, rode him about on his singing circuit. When the colts from Morgan's horse grew up they proved fine, and this gave him celebrity. He was a fleet runner at short distances, and this originally induced the people to try him."

In the ninth volume of the Cultivator, we published some letters from Justin Morgan and John Morgan, which in our opinion furnish the most authentic history of the origin of this race of horses that has yet appeared. Indeed, so far as it goes, we have the fullest confidence in its correctness. We republish the following extracts from those lettters. Justin Morgan, it will be remembered, is a *son* of the Justin Morgan who owned the original Morgan horse. Of course he speaks of many things according to his personal knowledge, leaving little chance for any mistake.

The following is an extract from a letter of Justin Morgan's, originally furnished for the Cultivator, (Vol. IX. p. 99,) dated Stockbridge, Vt., March 1, 1842. After stating that his father owned the horse from which the race of Morgan horses sprung, he says:—

"I will now relate the facts relative to said Morgan horse, as I reccollect them. My father, Justin Morgan, brought said horse, or rather said colt, into Randolph, Vt., in the summer or autumn of 1795. Said colt was only two years old when my father brought him to Randolph, and had never been handled in any way, not even to be led by a halter. My father went to Springfield, Mass., the place of his nativity, and the place from which he removed to Randolph, in the spring or summer of 1795, after money that was due to him at that place, as he said; and instead of getting money as he expected, he got two colts, one a three years old gelding colt, which he led, the other, a two years old stallion colt, which followed all the way from Springfield to Randolph; having been, as my father said, always kept with, and much attached to the colt he led. Said two years old colt was the same that has since been known all over New-England, by the name of the Morgan horse. My father broke said colt himself; and as I have before remarked, owned and kept him to the time of his decease, which took place in March, 1798, and said horse was five years old the spring my father died; and as before stated, soon after my father's decease, he passed from my father's estate into the possession of Wm. Rice, of Woodstock, Vt. I cannot state positively that my father purchased said colt in Springfield, Mass., but I am very confident that he purchased him in that town or in the immediate vicinity, on Connecticut river."

We next offer an extract from a letter of John Morgan, (see Cultivator, vol. IX., p. 110,) in which it will be seen that the material points set forth by Justin Morgan are confirmed, and some further light given in regard to the blood of the first Morgan horse. John Morgan resides at Lima, in this state, and is, we believe, a relative of Justin Morgan, sen., and was a near neighbor of the latter previous to his removal from Springfield to Vermont. In reference to the colt above described by Justin Morgan, (2d,) John Morgan says—"he was sired by a horse owned by Sealy Norton, of East Hartford, Conn., called the 'True Briton, or Beautiful Bay.' He was kept at Springfield one season by the said Justin Morgan, [sen.,] and two years after I kept him two seasons. This horse was said to have been raised by General Delancy, commander of the refugee troops on Long Island, and rode by him in the Revolution. It was said that one Smith stole the horse from the general at King's Bridge, while the general was in the tavern; ran him across the bridge and took him to the American army, near White Plains, and sold him to Joseph Ward, of Hartford, Conn, for $300. It was also said at that time that he was sired by the imported horse called 'Traveler,' said to have been kept in New-Jersey. Ward was a merchant and kept the horse three or four years for a saddle and carriage horse, and then traded him off to Norton, and Norton kept him for mares while he lived. The description of the Morgan breed given by Mr. G. Barnard, [Cultivator, vol. IX., p. 33,] answers well to the stock of 'True Briton.' I have always understood that Morgan kept the colt for a stallion at Randolph, and was very celebrated for his stock."

The above statements of Justin and John Morgan, comprise, as we believe, the true history, so far as it is known, of the origin of the far-famed Morgan horses. From the position of the Messrs. Morgan, they have had the best possible facilities for obtaining correct information on this subject, and we are not aware of any thing which should hinder their statement from receiving full credence.

Mr. Weissinger, in his letter to which we have above alluded, speaks of Mr. Hill's horse Black Hawk as follows: "I saw the celebrated Sherman Morgan, Black Hawk, at Bridport, and I think he deserves all the praise that has been bestowed upon him. He is the finest stallion I ever saw. His legs are flat and broad, shoulders well set back, loin and backbone very strong, length of hip beyond anything I ever saw; as quick in breaking as the bullet from the rifle; head and neck faultless; in motion, mouth open, crest sublime, legs carried finely under him, square and even, and fore-legs bending beautifully."

In relation to the characteristics and reputation of the Morgan horses, Mr. Weissinger observes:—"I have conversed with some of the best judges of horses and some of the most experienced breeders and horse dealers in the state. There is no doubt whatever of this—that the breed of the Morgan horse was, and is now, in the few instances where it can be found, far the best breed of horses for general service that ever was in the United States—probably the best in the world; and it is remarkable that this breed was and is now known by many striking peculiarities, common to nearly every individual. They have a full, heavy, wavy mane and tail, good head and neck, small well-shaped ears, are broad between the eyes, legs broad and short with large tendons, bodies rather thick set; but their most striking peculiarity is in their carriage; legs well under, trot quick, short, and springy, the fore-legs bending remarkably, the very reverse of the slow, slouchy movement of the race-horse in a trot. They are likewise exceedingly hardy and well tempered."

The following paragraph from Mr. Weissinger's letter contains facts worthy of preservation. Will some of our Vermont friends give us the *whereabouts* of the "Chelsea Morgan," with his owner's name?

"Of the old Morgan's progeny three became famou

as stallions, viz: the Sherman Morgan, the Woodbury, or Burbank, and the Chelsea. Of these the Sherman Morgan was greatly the most distinguished. I have ascertained to a certainty that he died in the winter of 1835. Black Hawk was sired by him. The Chelsea Morgan is the only one of the three yet alive. He is said to be yet full of vigor."

ELECTRICITY ON VEGETATION.

The Syracuse Daily Journal, in noticing some experiments detailed in our September number, has arrived at an erroneous conclusion in one particular. He says we stated wrongly in saying that the electric fluid passes *through* the lightning rod, and adds that "it passes along the surface of the rod, and not *through* the body of the metal." Hence he infers that poor conductors, brought into contact with the surface of the rod, may be influenced and become electrified. Perhaps the subject would be better understood, if it were stated that the fluid passes THROUGH *the* SURFACE. We all know that it cannot pass through a solid non-conducting substance (without *breaking* a way for its passage,) yet if a conducting rod be solidly encased in glass or any other non-conductor, the latter offers not the slightest obstruction to its progress, which could not be the case, if it passed *on* the surface, as the Daily Journal seems to understand. That it is confined to the *surface* of *conductors* is demonstrated by many experiments, not necessary to state here.

When we said that a man might clasp a lightning rod in a thunderstorm, (in ordinary cases,) without injury, we spoke from experience. We have many times held a metal rod in contact with the hand, while a discharge from the electric battery passed through the rod unfelt, sufficient to have knocked the senses out of any man. But previous care had been taken that the communication through this rod was perfect. We have also examined a lightning rod, the point of which was melted into a bullet, by a discharge from the clouds so loud that a cannon would be a mere pop-gun to it, yet the wooden supports of the rod, which it passed through in contact, were not visibly affected in the slightest degree. It is only when the conductor is too small for the discharge, shown in this case by the melting of the point, and in others by the rod becoming red hot, that surrounding bodies receive a portion of the fluid. But in none of the experiments mentioned, to show the influence of electricity on plants, was this the case.

Green trees are conductors of electricity, yet we do not find that plants grow more rapidly at the foot of tall oaks and hemlocks, than elsewhere.

The Journal mentions the case of a grape growing more rapidly and maturing its fruit earlier at the foot of a lightning rod. We knew a similar case; but the superiority was then owing to the large bed of loose earth made in digging the hole for the reception of the rod six feet into the earth. In the present case some other cause may have operated, with which we are unacquainted.

ELECTRO CULTURE.—We have heretofore cautioned our readers against a sanguine belief in promoting vegetation by means of electrical apparatus. We have heard no well authenticated case, among the many experiments which have been made this season, where vegetation has derived the least benefit from wires or stakes designed to govern or direct the electric principle. A like failure has, so far as we have heard, attended the trials in England and Scotland. The London Agricultural Gazette, states that—"all the experiments which have been heard from, show that no influence is exerted on the growth of plants by an electro-conducting connexion between elevated and buried wires, or according to other plans which have been tried. The word *electro-culture*, in fact, must for the present be considered a misnomer."

In relation to the failure of attempts at electro-culture, the writer of the article from which we have quoted the above, asks—"Has all this labor then been lost? That depends," he continues, "on the object of those who undertook it. Doubtless, some, believing in the evidence which before existed, have speculated in electro-culture as a means of profit—*their* labor certainly has been useless, and they must now blame either their own carelessness in not having previously sufficiently examined that evidence, or their own credulity in reference to what we must consider the imperfect observations of others. But wherever the subject has been tested by any one anxious merely to determine for himself the accuracy of a theory, the expense and labor which have been incurred cannot be considered lost, for the object of their outlay has been attained. An intelligently planned and carefully executed experiment, if its results be ascertained and recorded, cannot fail; it is simply a question asked of nature, and what the experimenter wants is—an answer; and thus the success of an experiment depends not upon the *character*, but upon the *obviousness* of its results. Now the results of the experiments we allude to have been most unequivocal, and accordingly those who performed them ought to be perfectly satisfied."

CURING HAMS.

MR. EDITOR—In the last Dec. No. of the Cultivator, page 374, were published certain directions for curing meat, which I consider worth double the subscription price to any person who wishes to cure and preserve meat for family use. The directions there given for curing hams, I have followed out to the very letter, (with the single exception of suspending them with their shanks downwards while smoking,) and the result is, that more delicious ham than I now have I never tasted. I had followed a course of my own, which was almost invariably the same till last year, but the mode recommended by you is so much superior to it, that no slight cause will ever again induce me to be indifferent in regard to the method of curing my hams. I cheerfully bear this testimony to the value of your receipt, knowing that those of your readers who choose to follow it will be amply repaid for the slight sacrifice of time and trouble, consequent upon so doing. A SUBSCRIBER.

Hoosick Falls, N. Y., 1845.

At the request of several correspondents, we here republish the receipt for curing hams above alluded to. We have practiced according to this mode for several years and have found it superior to any other with which we have been acquainted.

For every one hundred pounds of meat, take five pints of good molasses, (or five pounds brown sugar,) five ounces saltpetre, and eight pounds rock salt—add three gallons of water, and boil the ingredients over a gentle fire, skimming off the froth or scum as it rises. Continue the boiling till the salt, &c., is dissolved. Have the hams nicely cut and trimmed, packed in casks with the shank end down, as the pickle will thus strike in better. When the pickle prepared as above is sufficiently cool, pour it over the hams. They may lie in pickle from two to six weeks, according to the size of the pieces, or the state of the weather—more time being required in cold than in warm weather. Beef or mutton hams, or tongues intended for smoking and drying, may be cured according to this mode, and will be found excellent.

There are other modes of pickling hams which are much esteemed in various countries. In that excellent and agreeable work entitled "Farming for Ladies," we find the following directions for preparing the celebrated "Hambro' Pickle," which is said to be equally applicable to beef, pork, tongues, &c.—"To each gallon of water, put one pound and a half of common salt, a quarter of a pound of coarse brown sugar, and one ounce of saltpetre; boiled, and to be carefully scummed. After standing in a proper vessel until quite cold, the meat may be immersed, and will be fit for use in ten days, and improve for months; but it must be carefully kept pressed down by means of a cover, and a clean heavy stone. The pickle must be watched, and when any scum begins to rise, the meat must be taken out and the liquor reboiled, and scummed and cooled as before; at the same time half a pound more salt must be added; but no raw salt is to be applied at any time. The meat is to be

returned when the pickle is quite cold, say after ten or twelve hours. Tongues will require a month, a month at least, and are improved by the addition of an ounce of bay-salt added to the above. One clove of garlic, half an ounce of allspice, and as much whole pepper, boiled with the ingredients, much improves it."

HEDGES FOR AMERICA.

A great difference of opinion exists in relation to hedges for this country. There have been some very successful attempts, and there have also been many failures. An examination into the *causes* of this difference of success, in actual experiments, will doubtless be of use, and enable us to judge whether hedges possess advantages over other kinds of fence in any case. We lately examined several specimens of successful hedge making. A part of them were made by John Robinson of Palmyra, N. Y., a vigorous and enterprising English farmer, whose experiments are of several years continuance. He has over a hundred rods of hedge in different stages of growth, the management or treatment of which appears to be particularly worthy of attention.

The young thorns are set out in the hedge row at two years of age, after which they are cut off at the surface of the ground the first year, to cause a thick growth of sprouts; they are again cut off the second year, from four to six inches from the ground according to their height and vigor, which causes a second crop of thick sprouts at that height; the third year they are cut off six or eight inches higher, and so on, rising about at that rate, until the hedge is five or six feet high. This mode of treatment, which is well known and often practiced in England, obviates the necessity of *plashing*, if it is successfully performed; the successive crops of thick sprouts thus occasioned, densly interlace each other, and the hedge becomes a thick mass of entangled shoots and branches, which cannot be separated. It is in fact precisely similar to the process of *felting*, but on a larger scale; and when the best specimens thus grown, are forcibly shaken at any point, whole rods on either side, are shaken with it as in one mass. This felting property thus becomes of more value by far, to the impregnability of the hedge, than the thorns.

One hedge had received three different modes of treatment. A part had been imperfectly cultivated; another portion had been well cultivated for a distance of two feet on each side; and a third stood on ground which was trenched two feet deep before planting. The growth of the second was twice as great as the first, and of the trenched portion still greater. Indeed, one may as well think of raising corn by planting a row in a thick meadow, as to raise a good hedge without keeping the soil constantly mellow about the young trees. A space two feet wide on either side of the hedge is the distance usually kept cultivated.

From six to eight years are needed to make a good substantial hedge, proof against cattle.

These hedges were set on a bank about eighteen inches above the surface, with a ditch two feet deep serving to carry off surface water on one side. The plants are set six inches apart. If closer they do not grow so well.

The greatest difficulty, which J. Robinson finds, is protecting the young hedge for several years, until it is proof against cattle. For although it may be placed along the side of a fence, next to crops, or meadow, yet in the course of rotation, it is thrown into pasture, and is thus endangered. A longer course of alternating crops, would be the remedy in usual cases.

Hedges for *plashing*, are not subjected to the successive shortening down which has been just described; but the young stems are suffered to grow until several feet high, and an inch or more in diameter when they are cut partly off near the ground, and bent over to an angle of forty-five degrees in the direction of the line of the hedge. A thick growth of branches is not needed before this operation. All the *large* branches should be cut off at the time, but not closely. Young shoots afterwards ascend, and growing upright, form cross-bars with the main stems which have been bent over, and interlocking with them produce a sort of lattice work possessing ultimately great strength. A small portion of the trees are not bent, but remain upright, to stiffen the rest, and slender poles are run along the top, alternating with them, to keep them to their place, until the whole is firmly established. These poles, being green and of perishable wood, cost little, and rot out when they are no longer needed.

The selection of suitable trees for forming hedges, is of the very first importance. One great reason, without any doubt, why so many have failed in their experiments, is bad selection, or a want of adaptation of certain species, to the climate where they were used. The English hawthorn has been found entirely unsuited to most parts of the United States. At Newburgh, according to A. J. Downing, "its foliage becomes quite brown and unsightly after the first of August." He also remarks that it is there extremely liable to the attacks of the borer. Further south, where the summers are longer and dryer, and consequently more dissimilar to those of England, it is of no value whatever. But in the cooler summers of western New-York, and where perhaps the soil may exert also a favorable influence, it has continued to flourish in *well-managed* hedges for many years. All the hedges of John Robinson, already described, are of this species; a very vigorous hedge, on the grounds of John Baker of Macedon, N. Y., is of the same. We had supposed that moist, rich land would be better suited to this thorn than dry upland; but in the experiments of these intelligent farmers it has been found that good fertile upland is incomparably better.

The sudden failures, however, of this thorn, in some places further south, should induce its cautious use on a large scale, especially while American species have been found in most parts of the country so much superior. The Washington thorn, (*Cratægus cordata,*) is preferred by some, and possesses the advantage of the seeds vegetating freely the first year. But in Pennsylvania and Delaware, where both this and the Newcastle thorn (*C. crus-galli*) have been extensively used for many years, the latter has in all cases been found so decidedly superior in hardiness, vigor and freshness of growth, to the former, as to give it eminently the preference. Indeed, the Newcastle thorn, appears to be the only American species extensively tried, which has, *in all cases whatever*, proved to be entirely free from all disease or defect. It is not improbable, however, that the Washington thorn may succeed finely so far north as northern or western New-York, where the English species is itself so much more successful than elsewhere. Its easy growth from seed, besides, renders it worthy of trial. There are other trees, doubtless, of value for this purpose. The Buckthorn has been found perfectly hardy and successful around Boston; and the poisonous character of its bark secures it from attacks of the mice. Its thorns are only the pointed ends of the branches, which are hardly sufficient to repel all kinds of intruders. Of its treatment by successive heading down, its *felting* quality, and its capability of plashing, we are not informed, as in nearly if not quite all the specimens we have seen, these operations were omitted.

The expense of a *well made* hedge, until it is cattle proof, is about fifty cents per rod. Caleb Kirk, of Delaware, who was thorough and successful in his experiments, gave the following, as the cost of an excellent hedge thirteen years old:

1000 quicks, cost from nursery,.....	$5.00	
Planting, man and boy, each two days, ...	2.50	
Dressing, first year, with plow and hoe,..	1.00	
Expenses first year,.....	——	$8.50
Dressing for five successive years, plow and hoe,.....		5.00
7th year, trenching with plow, and throwing up ditch, three days, ...	$3.75	
500 stakes (for uprights,) cutting, and timber,.....	3.50	
Poles, (horizontal,) and cutting them,....	2.00	
One hand 3 days, at plashing,.....	3.00	
	——	12.25
8th to 13th year inclusive, one day each year trimming and cleaning,.....		4.50
Expense 13 years, sixty rods,.....		$30.25

It may be questioned whether hedges will ever be extensively used where timber or stones are plenty. But as many places are destitute, or likely to become so, experiments to determine their practicability must become very desirable. The disposition to neglect is so prevalent with most farmers, that *the great care and attention, and constant culture,* so necessary, will not be given, and success cannot take place in such cases. But with skilful management and enterprise they will doubtless be found highly profitable; that if good they will prove a great rural embellishment, we all know; and that those who have fruit gardens to protect from rogues, will find them the greatest security, is equally self-evident.

HANGING GATES.

The convenience of a *self-shutting* gate, is such as to need no argument to prove its utility. Various expedients are resorted to, and we see all over the country, chains and ropes with suspended weights to cause gates to shut of their own accord. But all this tackle and rigging is avoided, if the gate is hung to its post with a proper inclination.

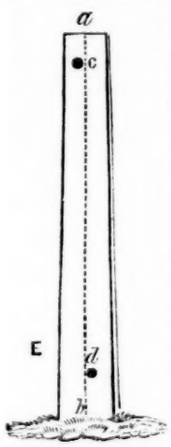


Fig. 98.

The mode of hanging a gate so as to shut by its own weight, is represented in the annexed figures. Fig. 98 shows the post set perpendicularly in the ground. On the face of this post the plumb line *a b* is to be drawn. Then bore the hole for the upper hinge at *c*, one inch to the left of this line, and for the lower hinge one inch to the right. When the gate therefore is hung, the turning point of the upper hinge will be two inches more to the left than the turning point of the lower. This will cause the gate to fall to the left or towards E; but if it is opened wider than a quarter of a circle, it will then begin and fall the other way or wider open. To obviate this, let the upper hook in the post project two inches more than the lower, and the lower eye on the gate project two inches more than the upper eye, as shown in fig. 99; the gate then will fall shut, if not opened more than three quarters of the semi-circle, which is about as wide as is generally needed. The distance between the gate and the post in the figure is represented as greater than in fact, to exhibit the principle more plainly. Reversing the position of the holes, placing the upper one to the right and the lower to the left of the plumb, will of course make the gate fall to the right as circumstances may require.

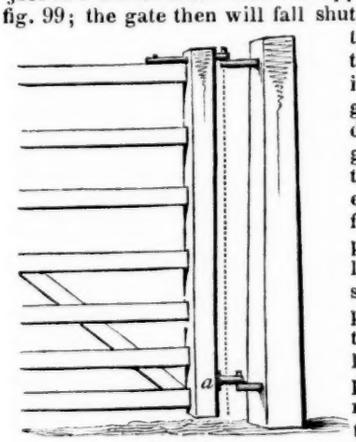


Fig. 99.

Although always desirable that the gate should shut itself, it is often convenient when opened nearly to its extreme limit, that it fall the other way, in order to remain open without fastening. If this limit is little more than a quarter of a circle, it may be hung merely as indicated in fig. 98. If more than three-quarters of the semi-circle, let it be hung as shown by the two figures combined. But, to be applicable to all circumstances, the principle should be known; which is this—suppose the gate is hung so as to swing freely through the whole circle—if the two turning points are in the same perpendicular line, it will of course remain at rest wherever it is placed, and not turn of itself. But if the perpendicular line from the upper falls to a point a short distance from the lower, then a line connecting this point with the lower turning point, will show the direction the gate will remain at rest. A figure, (fig. 100,) will make this plainer; let *a* be the lower turning point, and *b* the upper; then the gate will remain at rest in the direction of the line *d b*, and the highest point of elevation, from which it will fall both ways, will be *e*. But if *c* be the upper turning point, the gate will remain on the line *f*, *c*, and the highest point of elevation will be *g*.

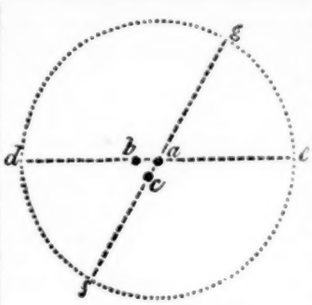


Fig. 100.

The *force* with which the gate will fall shut will be as the distance of the lower turning point from the plumb line; where this distance is small, it will shut slowly; where it is great, it will fall rapidly against the post. By cutting a screw on the part of the lower hinge which enters the gate, the distance from the post may be changed by the nut *a*, fig. 99, and the gate thus raised or lowered at pleasure to avoid the inconvenience of the sinking of the post, or of obstruction from snow.

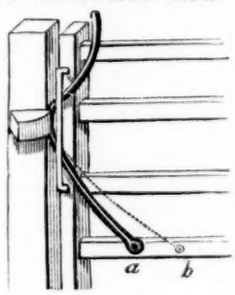


Fig. 101.

Figure 101 represents an excellent and cheap gate latch, made by bending a half-inch rod of iron in the shape indicated, and fastening it by an iron pin on which it moves at *a*. Its weight causes it to fall against the post. If bent in the direction of the dotted line and and moving on a pin at *b*, it will fall more quickly.

If any one should think too much space is occupied by these apparently trifling matters, let him calculate the labor of dragging a single gate over the ground for one year, and fastening it by tying a cord or leather strap round it every time. If passed ten times a day—many are passed five times the number—it would be more than three thousand times a year. To drag open and shut and fasten such a gate, that number of times without stopping, would be hard indeed; and the labor would pay for many gates, hinges, fastenings and all.

AGRICULTURAL EXHIBITIONS.

The spirit which has this year been evinced in regard to the exhibitions of agricultural societies, is highly gratifying. From all parts of the country we are receiving accounts of these exhibitions, and all agree that the interest and zeal manifested, is beyond any former precedent. We regard this as a positive indication of the advance of agricultural improvement—it shows that the people are awaked to its importance, and that a determined action is aroused, the beneficial results of which cannot fail to be experienced.

From this state, we have already received accounts from fifteen county societies, the exhibitions of which were held as follows:—Cayuga co. at Auburn, Oct. 8th and 9th—Herkimer co. at Herkimer, Sept. 25th and 26th—Oswego co. at Oswego, Oct. 00—Chautauque co. at Forestville, Sept. 24th and 25th—Westchester co. at White Plains, Oct. 8th—Erie co. at Buffalo, Oct. 8th—Montgomery co. at Canajoharie, Oct. 8th—Columbia co. at Hudson, Oct. 7th—Onondaga co. at Syracuse, Oct. 8th—Ulster co. at Rosendale, Oct. 7th and 8th—Madison co. at Hamilton, Oct. 1st—Wyoming co. at Perry, Oct. 1st and 2d—Wayne co. at Palmyra, Oct. 1st and 2d—Rensselaer co. at Troy, Oct. 8th and 9th—Greene co. at Cairo, Oct. 00

From Vermont, also, we have accounts from several societies. The Addison county society held its exhibition at Middlebury, Oct. 2—Chittenden co. at Burlington, Sept. 24 and 25—Windsor co. at Newfane, Oct. 1. From Connecticut and Massachusetts we have likewise accounts, which, as well as those from other states, we shall notice as we find room.

We have room in this number for no more than a brief notice of these shows—indeed some of the reports received furnish no more than a mere statement of the awards, without comment or remark.

The show at Syracuse, is spoken of as quite superior to former years—in *sheep* of various kinds, it was deemed not far behind that of the State Society. Premiums were awarded for the best cultivated farms, of which, however, we shall not here speak particularly, as it is our intention to make a personal examination of those farms and others of that fine section, before our next no. goes to press.

The show at Auburn is said to have been better than any previous one. A rule has been adopted that hereafter, cattle, sheep, and hogs, shall only be considered in competition with those of the same breed.

At Hamilton the show was particularly good in dairy products and cattle. From 200 to 300 animals of all kinds were on the ground—all generally superior The sheep were thought to have been unsurpassed at the State Show. Premiums were awarded for the best cultivated farms—Alanson Annas, of Cazenovia, taking the first, and Rufus S. Ransom, of Fenner, the second. Daniel Gates, of Sullivan, was deemed to have the best cultivated farm in the county, but he has before taken the first premium.

At Poughkeepsie the show was good in all respects. Premiums were here awarded for the best cultivated farm. Mr. Sheafe taking the first—in relation to which an extract from the report of the committee will be found in another part of this paper.

At Buffalo the weather was rainy and uncomfortable, which operated against the exhibition. The show of "blood and grade stock was not so good as the two previous years." Of sheep, the show was superior to former years—there were good specimens of long wooled breeds and others. Excellent cheese was shown from Hamburgh and other parts of the county.

The exhibition of Chautauque county at Forestville, is said to have been on all hands superior to former years. There was a fine display of horses, fine-wooled and long-wooled sheep, butter and cheese, and a long list of miscellaneous and manufactured articles. Altogether, it is said, the show evinced that the farmers of that county are advancing rapidly in improvement.

We notice that several societies, among which we would name that of Barbour county society at Eufaula, Alabama, and Ontario and Saratoga in this state, have awarded volumes of the Cultivator as premiums. The number of volumes which have been thus distributed, is greater this, than in any previous year, and we wish to tender our most respectful acknowledgments, for the confidence which has been in this manner expressed in the usefulness of our work.

Exhibition of the Rensselaer County Agricultural Society.—This exhibition took place at Troy, on the 24th and 25th of September. The weather happened unfavorable the first day—it being rainy in the forenoon, leaving the ground in a damp, unpleasant condition. This probably prevented the show being as full in some departments as it otherwise would have been. Still the show may be said to have been on the whole better than that of last year. The show of fabrics and mechanical productions was good and highly creditable to the manufacturers and citizens of Troy and vicinity. Among the implements we noticed a tool calculated for various purposes—such as cultivating various crops, digging potatoes, &c., &c., which we thought valuable, offered by J. D. Dale, Lansingburgh. A very curious bee-hive, with the bees in it, was offered by E. L. Roberts, Brunswick. It consisted of several apartments which could be opened like a book-case, showing the bees at their work, throughout the whole colony. A model bee-house, with boxes of fine honey, offered by Nathan Howard, Stephentown. We should think the house an admirable one for the safety of the bees, convenience of managing them, &c. Townley's bee-hive, with specimen of honey from it, was also shown. The Horticultural department presented a good display of apples, grapes, and some fine pears and peaches, from the gardens of Messrs. Vail, Van Rensselaer, Kelly, and Buswell. Among the fabrics, we noticed some excellent samples of ginghams, one piece of which was in the loom only two hours before it was exhibited at the show. These were offered by Benjamin Marshall, of the Troy Mills, who also presented a most superior piece of fine shirtings, with the "linen finish,"—much admired by all.

The cattle, with the exception of four or five fine animals from Mr. Vail's herd, were mostly of the common and mixed breeds, and among them were several good milch cows. The working cattle were many of them good in appearance. The display of horses was very good, and there were many very fine ones for the carriage and the road. Of swine we noticed some fine pigs, a cross of the Berkshire, offered by Isaac Tallmadge, Scaghticoke. and some fine Leicester pigs by Elijah Pearl, Troy. Of sheep, we noticed several lots of mixed blood, South Down, Leicester, Cotswold, and common, which appeared to be very good for mutton. Also some good fine wooled sheep. Five wethers, Saxon and Merino, crossed, offered by Isaac Tallmadge, were the fattest sheep of that blood we ever saw, and we were told they had only been fattened on grass. A beautiful yearling Merino buck offered by B. H. Streeter, Berlin, purchased at Poughkeepsie last year of J. N. Blakesly. A fine show of geese and ducks was made by Edward Lyons, Troy, embracing Wild and Chinese geese, cross-breed do., and some very handsome Muscovy ducks.

The address, which we regret not being able to hear, was delivered by J. B. Nott, Esq., Guilderland.

Oneida County.—This exhibition took place at Rome, on the 9th and 10th of September. From a letter of a correspondent we make the following extracts:—

"It is but justice to the ladies of Oneida to say that their department was admirably represented, and the premiums were distributed so as to afford, we believe, general satisfaction. The exhibition of fruits was very good, and of vegetables, notwithstanding the dryness of the season, more were exhibited than formerly. Our show of horses was decidedly good and quite extensive.

"Of cattle we had seven entries less than last year. This was owing partly to the near approach of the State show, but perhaps more to the poor condition in which many cattle are this fall. We have had very little feed since midsummer, and consequently cattle are not in high order.

"The address was delivered by the President of the Society, [E. Comstock, Esq.,] at 3 o'clock, P. M, of Tuesday. On Wednesday morning the plowing match was held. Most of the farmers believed that the ground was too hard to admit of plowing at all, and none but the most resolute and experienced plowmen ventured to enter. There were, however, seven teams in the field, (which number would have been more than doubled had the ground been in good condition,) every one of which did admirable work. Indeed, we have never seen better work done any where. The reports of the committees were announced at 2 o'clock, P. M., on Thursday, during the reading of which the deepest interest was manifested by all present, and the exercises closed without a single occurrence calculated to create unpleasant feelings, or affect injuriously the interests of the society. The receipts were fully sufficient to pay all premiums and expenses. About six hundred dollars were received by the Treasurer, including the amount received from the state."

Monroe County.—Our "Farmers' Jubilee," or annual Fair, was held in the city of Rochester, on the 7th. The day was fine, and the display, as a whole, more spirited, and the attendance more general, than on any occasion of the kind in this county, for several years. There was a superior display of fruits and vegetables—more and finer varieties of apples, in particular, than I recollect ever having seen at any of our Fairs—the State Fairs not excepted. The show of horses was somewhat large, but not very select—there were a few very fine ones, however. Of cattle the display was, perhaps, an improvement upon the show of last year, especially in the improved breeds, though far below what it ought to have been. Our friend Garbut, of Wheatland, had a lot of his beautiful Devons on the ground,

some of which took premiums, and your friend HYATT, the "printer-farmer," was there with his little herd of Herefords and Durhams, seven in number, *all of which took premiums*. Don Quixotte, the Hereford, (2 years old in August,) took the first prize as the best bull over two years old in his class, which embraced Durhams, Herefords, Devons and Ayrshires,; and Emma, Hereford, took the first prize as the best two year old heifer, in the same class. ["Don" and "Emma," you will recollect, both took the first premiums as the best two year olds in their class, at the recent State Fair at Utica] Albino, another of the seven, received the first prize as the best yearling bull in the same class with the Herefords; he took the first prize last year, at the Poughkeepsie State Fair. There were several very fair Durham bulls, of various ages, present; also a tolerable lot of grade and native cattle; there were also several noble pairs of working oxen, that would not suffer by a comparison with any that were at the recent State Show. Of hogs, there were but a few that might be ranked as good. Of sheep, there were a goodly number, of fine and long wooled, of the Merino, Paular, South Down, Cotswold, &c. Gen. Harman's Paulars were very fine. There was a tolerable display of farming utensils, domestic fabrics, &c. There were several beautiful varieties of dahlias and other flowers, presented by Messrs. Ellwanger & Barry, Mr. King, Mr. James Whitney, &c. The address was delivered by L. B. LANGWORTHY, Esq., Col. Randall, of Cortland, who had been invited, and was expected to perform that duty, having been prevented by sickness in his family. Upon the whole, the Fair went off as well as had been anticipated—and the farmers of Monroe have reason to be encouraged in their labors by seeing the evidences which were there exhibited of the onward progress of agricultural improvement. *Elmwood Cottage, Oct.* 9, 1845.

T. H. H.

LIVINGSTON CO.—Extract of a letter from C. H. BRYAN, Esq., Geneseo, Oct. 10:—"Our cattle show and fair was decidedly more interesting and more numerously attended than any previous one. There could not have been less than 3,000 persons present."

SARATOGA.—The cattle-show was held at Ballston Spa on the 15th ult. and a letter from a getleman present, informs us that it was "decidedly the best one ever held in the county."

HARTFORD COUNTY (Ct.) AGRICULTURAL SOCIETY.—The exhibition of this society took place at Hartford on the 3d of Oct. From one of the officers, we have received the following sketch:—"We had fine weather, and a splendid show of fine cattle—more good animals, I think, than we ever had before. We had an excellent address, and a *good dinner*, &c. The exhibition of *fruit* was perhaps equal to any show of the kind in the country. Vegetables were likewise superior—domestic manufactures, arts, and *fine* arts also good. Mr. Ellsworth had a gold medal awarded him for his self-acting pump."

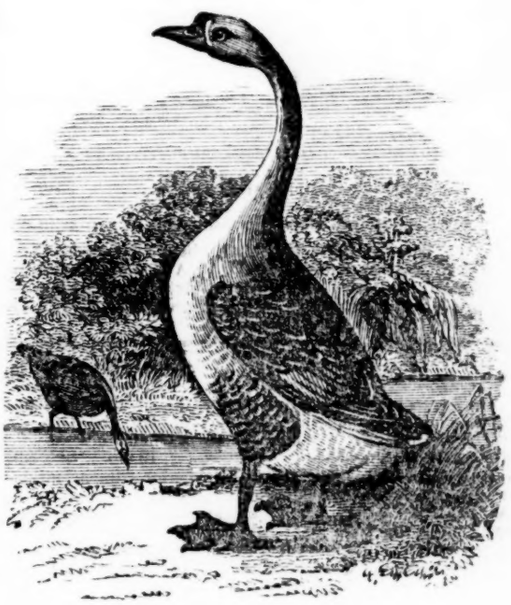
R. I. HORTICULTURAL SOCIETY.—The first exhibition this Society, was held at Providence, on the 1st of Oct., and "exceeded in variety, quality and excellence, all expectations," the number of samples of fruit alone amounting to 530.

IMPORTATION OF CATTLE INTO MASSACHUSETTS.

THE Massachusetts Society for Promoting Agriculture, instead of having a public show this season, appropriated a portion of its funds for the importation of cattle. An agent, Mr. A. Beckett, of Lowell, was sent to England and Scotland for the purpose of procuring the best samples of the Devon and Ayrshire breeds to be found. Mr. Beckett returned to Boston about the first of October, bringing with him, as we learn from the N. E. Farmer, four cows and a bull of the Ayrshire breed, four North Devon cows and a bull, and a calf dropped by one of the Devon cows on the passage. They are spoken of as being very fine, each lot exhibiting the peculiar points and marks which are most prized in their breed. Their cost, original purchase and expenses added, is stated to be about $3000—or $300 each. The Devon cows were purchased of Lord Leicester, of Holkham, Norfolk, and the Devon bull of Mr. Bloomfield, whose stock is well known, and is considered equal to any in England. It was from his herd and Lord Leicester's that Mr. Patterson, of Baltimore, obtained his much admired Devons.

The Ayrshires are spoken of as "perfect in their kind." They were selected from several of the best herds in Scotland.

We have no doubt this stock will be of great value to Massachusetts, and even to other states.



CHINESE GOOSE.—(Fig. 102.)

There are probably several varieties of geese in the "Celestial Empire." We have seen two or three kinds which have been brought to this country. One kind were uniformly of a dusky white color, though in other respects resembling the grey variety, for one of which the above cut was taken. This grey kind are very prolific, hardy, and profitable. We know of none equal to them in these respects. They will rear two broods in a season, and though the last ones do not come out till autumn, and the nights are frosty, they get along and grow through the winter without any trouble—laying and rearing a brood for themselves the next season.

At the Fair at Poughkeepsie in 1844, Messrs. A. & H. Mesier, of Fishkill, exhibited some of these geese, which attracted much attention. We had the pleasure of making a visit to Messrs. Mesiers' farm in August last, and there saw altogether the finest flock of these geese we ever met with. There were three or four broods of goslings which were hatched in May, grown up—apparently as large as the old ones—and the geese which hatched these were all then sitting for a second brood, which were expected out the first of September.

The form of these geese is very handsome—their necks are long, with a graceful curve—their bodies round, and thickly covered with fine feathers. The upper part of the bill rises in a knob—a characteristic of all the Asiatic goose-tribe, so far as we know—and both the bill and legs are black. Their general color is almost as uniform as that of our American wild geese. Their flesh is considered superior.

These geese should not be confounded with the large African variety, called by Cuvier *swan geese*, which are of enormous size, but rather unprolific.

The above cut was taken for a Chinese goose belonging to Mr. C. N. Bement, to whom we are indebted for a loan of the cut.

Dig out peat and muck, and let the frost and rains act on it through the winter.

PRICES OF AGRICULTURAL PRODUCTS.

New-York, October 23, 1845.

COTTON.—The variation from the prices given last month, may be said to be a decline, experienced since the arrival of the steamer of the 19th, of ⅛ to ¼ cent per lb.

BUTTER.—Western, 11*a*14—Goshen, 18*a*25.

CHEESE—5½*a*7.

FLOUR—The advance occasioned by the news per the steamer Great Britain, is stated at 75 cents per bbl. on common qualities, and 50 cents on extra. Michigan and Ohio, $5.31*a*$5.35—Genesee, $5·44—City Mills, $5.75.

GRAIN—Wheat, $1.19*a*$1.20.

HEMP—Dew rotted, American, per ton, $90—Sisal, $130.

HOPS—per lb. 15*a*16 cents.

HAMS—scarce, 8½*a*9 cts.

BEEF—Mess, $9.

LARD—8*a*8½—in demand.

PORK—In demand—Ohio $13.87½.

TOBACCO—Kentucky, per lb. 3 cents—Connecticut seed leaf, 8*a*10.

WOOL—(Boston prices.) Oct. 22:

Prime or Saxony fleeces, washed per lb.....	$0.37*a*0.40
American full blood fleeces,.....	35*a*0.37
" three-fourths blood fleeces,.....	33*a*0.34
" half blood do	31*a*0.32
" one-fourth blood and common,....	28*a*0.30

ALBANY, Oct.24.—Sales of flour have been made to-day of Genesee and good western at $5.44*a*$5·56½ A load of Genesee wheat was sold at $1·15. Barley sells at 57*a*59c. for two rowed: a prime lot of two-rowed is in market at 62½c.—no sales four-rowed. Oats, 40*a*41c. Rye, 72½c. in the streets.

VALUABLE WORKS, BY A. J. DOWNING, Esq.

1. *The Fruits and Fruit Trees of America*, or the Culture, Propagation and Management, in the Garden and Orchard, of Fruit Trees generally; with descriptions of all the finest varieties of Fruit cultivated in this country 1 thick vol. 12 mo. Fifth edition, with many engravings.—$1·50. Or a superior edition, in large 8 vo., to match the author's other works. $2.50.

"At length we have the gratification of announcing this long expected work, and from a perusal of it, we can say, that nothing compared with it on the subject of Pomology has yet been published in the United States. This work will unquestionably now become the standard pomological work of this country; for the great care bestowed on the different kinds, arranging and connecting numberless synonyms, and giving accurate outlines and descriptions, will make it a safe guide."—*American Agriculturist.*

2. *A Treatise on Landscape Gardening*; adapted to North America, with a view to the improvement of Country Residences. Comprising historical notices, and general principles of the art; directions for laying out grounds, and arranging plantations; description and cultivation of hardy trees; decorative accompaniments to the house and grounds; formation of pieces of artificial water, flower-gardens, etc.; with remarks on Rural Architecture. New edition, with large additions and improvements, and many new and beautiful illustrations. 1 large vol. 8 vo. $3.50.

This volume, the first American Treatise on this subject, will at once take the rank of the standard work."—*Silliman's Journal.*

"Downing's Landscape Gardening is a masterly work of the kind—more especially considering that the art is yet in its infancy in America"—*Loudon's Gardner's Magazine.*

3. *Designs for Cottage Residences*, adapted to North America, including Elevations and Plans of the Buildings, and Designs for Laying out Grounds. By A. J. Downing, Esq. 1 vol. 8 vo., with very neat illustrations. Second edition, revised $2.00.

A second edition of "Cottage Residences" is just published as Part 1; and it is announced by the author that Part II., which is in preparation, will contain hints and designs for the *interiors* and furniture of cottages, as well as additional designs for farm buildings.

4. *Gardening for Ladies*; and Companion to the Flower-Garden. Being an alphabetical arrangement of all the ornamental plants usually grown in Gardens and shrubberies; with full directions for their culture. By Mrs. Loudon. First American, from the second London edition. Revised and edited by A. J. Downing, Esq. 1 thick vol 12 mo., with engravings representing the processes of grafting, budding, layering, &c., &c. $1.25

"This is a full and complete manual of instruction upon the subject of which it treats. Being intended for those who have little or no previous knowledge of gardening, it presents, in a very precise and detailed manner, all that is necessary to be known upon it, and cannot fail to awaken a more general taste for these healthful and pleasant pursuits among the ladies of our country"—*N. Y. Tribune.*

Published and for sale by WILEY & PUTNAM,
Nov. 1—3t. 161 Broadway, N. Y.

ILLINOIS FARMS FOR SALE.

THE subscriber offers for sale a splendid farm of over 1000 acres, in La Salle county, within five miles of Peru, the termination of the Illinois and Michigan canal, oak openings, rich deep soil, beautifully situated on a Plateau, watered by the Little Vermillion and the Tomhawk, excellently adapted for a sheep farm. There are about 2000 sheep at present on the farm, with fences, &c., suitable, and a field sown with cultivated grasses—about 200 acres under cultivation.

Also other farms in the vicinity of Chicago and the canal, one on Rock river, and one in Wisconsin A. BRAND.
Chicago, Oct., 1845.—1t*

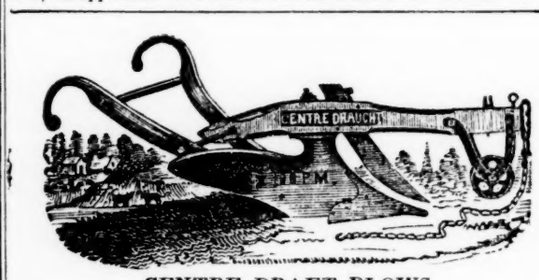
COTSWOLD SHEEP FOR SALE.

THE subscriber being desirous of retaining upon his farm only the South Down sheep, offers for sale his flock of Cotswolds, consisting of 6 rams—one 4 years old, one 3 years old, one 2 years old, two yearlings and one lamb; the two former having taken the first prizes at the State Fair and at the Fair of the American Institute. Also twenty ewes—three being lambs—the remainder from one year to four years old. The rams and fifteen of the ewes are all bred from sheep imported by Messrs. Corning and Sotham, and five ewes from the flock of Mr. Thos. Dunn.

Albany, Oct. 22, 1845. J. M'D. M'INTYRE.

GARDENER WANTED.

A YOUNG MAN of good character, who understands his business thoroughly, may hear of a pleasant and permanent situation, on application to the Editor of the Cultivator. Oct. 15—1t*



CENTRE DRAFT PLOWS.

D. PROUTY & Co., Nos. 19, 20, & 22, North Market-st. Boston, manufacture and keep for sale, a large assortment of the most improved Implements of Agriculture, including their celebrated Centre Draft Plows, Cultivators, Harrows, Straw-Cutters, Seed Sowers, Vegetable Cutters, Corn-Mills, Ox-Yokes, &c. &c. For the character of their plows, they have only to refer to those who have used them. The demand for them for a few years past, has been great—they having been sold extensively over the country from Maine to Louisiana, and the western States, as well as in the British Provinces; and have not failed to satisfy all purchasers of their great superiority in the qualities of neatness of workmanship, strength, durability, ease of draft, and complete execution of the work.

The above articles are for sale at the ALBANY AGRICULTURAL WAREHOUSE, No. 23 Dean-street, at the Manufacturer's prices.

FARM FOR SALE.

THE subscriber offers for sale the farm upon which he now resides, situate in the village of Auburn, in the county o Cayuga, and containing 100½ acres.

This farm lies upon the south side of the western turnpike, (now Genesee-st., Auburn,) and is well known as having been the residence of Hon. Nathaniel Garrow, deceased, for many years.

The buildings, fences and other erections thereon, are ample and in good repair; the soil will vie with that of any other farm in Western New-York, for fertility, variety and earliness of vegetation. Great attention has been paid ae well by the former as also by the present owner, to the selection and cultivation of choice fruit, and there is now upon the farm, in full bearing, a great abundance of the best varieties of apples, pears, cherries, peaches, grapes, &c. &c. The farm is well watered, durable springs, which give a never failing and ample supply.

The location is believed to be as desirable as that of any other arm in the state, as well for farming purposes as also for the residence of the gentleman or a man of business, being withing a few minutes walk from the Rail Road Depot, and within a few rods of the Female Seminary.

A credit will be given, if desired, for a large portion of the purchase money, for a term of years upon payment of interest annually. Inquiries may be made of the subscriber upon the premises, of Luther Tucker, Esq., Editor Cultivator, Albany, or of David Wright, Esq., Auburn. JOHN REMER.
Auburn, N. Y., July 14, 1845.—3t.

NEW AND IMPROVED POUDRETTE,

MADE by the Lodi Manufacturing Co., may be had by application at the office of the Company, No. 51 Liberty-street, New-York, or by addressing a letter (post paid) with directions how to ship, &c., to "The Lodi Manufacturing Co., New-York." The price for it, delivered anywhere in New-York city, free of cartage, &c., is as follows: For one barrel, $2.00; for two bbls., $3.50; for three barrels, $5.00; four barrels, $6.68; five barrels, $8.00; six barrels, $9.75; and for any quantity over six barrels, $1.50 per barrel. Pamphlets and instructions for its use, may be obtained gratis at our office.

The Lodi Manufacturing Co., defy competition in the art of making a *cheap, powerful*, and *lasting* manure, and strenuously invite a fair trial between *an equal cost* of their poudrette, and an equal cost of the best guano in existence.

It is hoped that the successful trial of poudrette upon wheat, on Long Island, the last season, will encourage many others in other parts of the country, to make a trial of its effects this season Quantity per acre for wheat is 10 barrels, or 40 bushels, sown broadcast with the seed, and harrowed in.
Sept. 1—2t.

RENSSELAER INSTITUTE.

A PRACTICAL, SCIENTIFIC, AND MATHEMATICAL SCHOOL.

THE winter term of this institution will commence on Wednesday, the 5th of November next. The course of studies pursued is still the same with that pursued when under the charge of Prof. Eaton, with the addition of Theoretical Mathematics.

The following is a brief view of the branches pursued in the Institute.

1. Theoretic Mathematics.
2. Practical Mathematics with special application to Surveying, Navigation, and Civil Engineering.
3. Natural Philosophy, including Mechanics, Hydrostatics, Hydraulics, Pneumatics, Optics, Electricity, and Magnetism, with their applications.
4. Chemistry, experimental and practical. This science will be taught and illustrated with particular reference to Agriculture and the Arts.
5. Natural History, including Botany, Geology, Mineralogy and Zoology.
6. Occasional lectures will be given on subjects pertaining to Taste, Morals, and the Christian Religion.

Besides the courses of lectures by the Faculty, each student is required to give lectures on the branch of science which he is pursuing, illustrating his subjects—in Mathematics and Natural Philosophy by surveys, measurements, observations, or experiments of his own—in Chemistry with experiments performed with his own hands—and in Natural History, as far as possible, by specimens of his own collection; and he thus acquires theoretic and practical knowledge, as he is explaining it to others. In this method of instruction it is hardly possible for a person to pass through the appointed lectures, illustrations and experiments, without attaining an intimate and familiar acquaintance with the studies prescribed. The learner becomes himself the teacher, and he must first learn in order thus to explain his subject to others.

Rev. N. S. S. BEEMAN, D. D., Prest.
WM. P. VAN RENSSELAER, } V. Pres'ts.
Hon. DAVID BUEL, }
GEORGE H. COOK, } Professors.
JOHN WRIGHT. M. D., }

The price for tuition will be $15 per term—two terms in the year—one commencing on the first Wednesday in November, and continuing 20 weeks, and the other commencing on the first Wednesday in May, and continuing 22 weeks. Those who perform a course of experiments with their own hands, are charged $8 extra for chemical substances and apparatus, unavoidably destroyed.

Board can be had from $2 to $2.75 per week.

Oct. 1. 1845—2t.

FRUIT TREES.

THE subscribers are now ready to receive orders for *superior Fruit Trees*, viz: APPLES, PLUMS, PEARS, CHERRIES, PEACHES, Quinces, &c., &c., from *their new and extensive nursery*. Their assortment, which they offer for sale the coming fall, is very large and fine. The trees are handsome, thrifty, and of the most suitable size and age for transplanting, and being propagated by the proprietors themselves with the most scrupulous care, either from bearing trees in their own grounds, or from others of undoubted genuineness, and being in every other respect until they are sent from the nursery, under their *immediate personal supervision*, they can be confidently recommended.

It is expected that all orders coming from persons unknown to the proprietors, will be accompanied by a remittance, or that some responsible reference will be given. Orders are entered on the order book, to be forwarded as soon as practicable in the fall. Orders respectfully solicitied, and will receive prompt attention.

WILSON, THORBURN & TELLER, or
WM. THORBURN, Seedsman, 38 Broadway.

Albany. Sept. 1—3t.

☞ A liberal discount made to those who purchase to sell again, or by wholesale.

PRINCE'S LINNÆAN GARDEN AND NURSERIES,

Flushing, L. I., near New-York.

THE GREAT ORIGINAL ESTABLISHMENT.

THESE Nurseries are not only the largest in the Union, covering near 60 acres, but the collection of Fruit and Ornamental Trees, and Plants, is the *most extensive and select* in America, being the result of investigation during a century. The specimen ground comprising 1700 trees from which the Nurseries are ingrafted, thereby ensuring their accuracy. The collection contains more than 500 *new and rare varieties* of fruits, and above 1000 rare varieties of flowering shrubs, and roses, that are in no other nursery. The new descriptive Catalogues, with reduced prices, and directions for culture, will be sent to every post-paid applicant, and all orders will be executed with that accuracy and dispatch which characterize the establishment. The public are cautioned against a spurious use of our name and title, by an Attorney at Law, named Winter.

Oct. 1—1t. WM R. PRINCE & Co.

SEEDLING APPLE-TREES FOR SALE,

BY J. J. THOMAS, at his Nursery, Macedon, Wayne Co, N Y., one year old, and from 5 to 10 inches high, at $3 per thousand No charge made for packing, for orders of 5000 each: or 50 cts. per 1000 for less. Orders to be post-paid and accompanied with remittances.

Oct 1—1t.

BOOKS FOR SALE.

AMERICAN Farmer's Encyclopedia, price $4—Skinner's Cattle Doctor, price 50 cents, and a variety of other works, for sale at the office of "The Cultivator."

FAN MILL AND CRADLE MANUFACTORY.

THE subscribers continue to manufacture Fan Mills and Grain Cradles of the very best quality. The subscribers have recently improved their Fan Mills, so that wheat and all other kinds of grain and seeds are thoroughly cleaned by being run through the mill once Said improvement has been secured by letters patent, bearing date the 10th day of July, 1845.

Notwithstanding the labor and expense which we have bestowed upon the improvement of our Fan-Mills, we are enabled to furnish the "Patent Fan-Mills" at the same prices which we have received for mills heretofore manufactured by us.

We manufacture four different sizes of Fan-Mills, seven sieves to each mill Prices from $21 to $27, according to size.

Orders from abroad promptly filled, and a liberal discount to dealers.

I. T. GRANT,
D. H. VIALL.

Schaghticoke, Junction P. O., Rensselaer Co, N. Y.

We the subscribers certify that we have witnessed the operation of I. T. Grant & Co.'s "Patent Fan-Mill," upon wheat and all kinds of grain and seeds, and have no hesitation in pronouncing it superior to any mill now in use. The operation of cleaning wheat is performed with one-half the time and labor required by other mills, as it chaffs and screens at the same time. All kinds of grain and seeds are thoroughly cleaned by being run through the mill once. We cheerfully recommend, and advise all farmers who wish to purchase a fan-mill, to purchase the "Patent Fan-Mill" manufactured by I. T. Grant & Co.

John M. Mott,	H. K. Duer,
L. D. Eddy,	John Case,
Cha's J. Wilber,	Henry P. Stuntz,
James H Rice,	Philip H. Stuntz,
Moses Buckley,	Edwin Smith,
P. G Williman,	James G Gordon,
Calvin Morse,	George W. Corry,
James H. Jones,	Francis Crocker,

I know little of the utility of the fan-mill above described except from information. I am, however, personally acquainted with almost every one of the above subscribers, and have no hesitation in saying that the most implicit confidence may be reposed in all they certify JOB PIERSON.

I am intimately acquainted with the Hon. Job Pierson, who has signed the above certificate. He is a highly respectable man, (formerly member of Congress,) and I have great confidence in him.

W L. MARCY.

For sale at WARREN'S, in Troy, D. L. CLAWSON'S, No, 192 Water-street, New-York, and at COMSTOCK & Co.'s Agricultural Warehouse, Albany. Sept. 1—3t.

WILLIAM HOVEY'S PATENT STRAW CUTTER.

THE subscriber having made some important improvements in his tools and machinery for building his celebrated Straw Cutter, is now able to offer them at the following reduced prices:—

No. 1. $10,	former price	$12.
No. 2. $12,	"	"	$15.
No. 3. $15,	"	"	$20.
No. 4. $20,	"	"	$25
No. 5, $25,	"	"	$30.
No. 6. $30.	"	"	$35

A liberal discount will be made to dealers. The great advantage that these machines have over all other Cylinder Cutters consists principally in the ease and facility with which the knives can be adjusted, for which he holds letters patent. Any one knife may be taken off and ground without taking off the whole number; and should any one knife become narrow by grinding, the edge can be set out by set screws, so as to come in equal contact with the hide roller, without the necessity of grinding all the other knives down to the same width. The wings to which the knives are fastened are of vast importance, as they serve to strengthen and support the knives, and prevent them bending while cutting cornstalks or other coarse fodder.

Machines will probably be offered by others in the market, made to resemble these Cutters, but entirely without the above named improvements. The knives are fastened on a cylinder without wings to support them, and are confined by rings on each end. No one knife can be taken off without the whole number—and in case of inequality in the width of knives, the machinery becomes useless unless they are all ground equal, as there are no means of setting out the edges to make them cylindrical, and it will be extremely difficult to grind them so perfect that they will all come with equal contact on the roller on which they are designed to cut. Should such an imperfect article be wanted on account of cheapness, the subscriber will furnish a better one at a cheaper rate.

CAUTION.—Any person who shall make, use, or sell to others to be used, any of the above improved Cutters, will be held accountable for the infringement of the above named patent.

Worcester, Mass., August, 1845. WILLIAM HOVEY.

N. B. Ruggles, Nourse & Mason, having ceased to act as my agents, a full assortment will be kept for sale at the Farm Implement and Seed Warehouse of D. PROUTY & CO., Nos. 19, 20, and 22 North Market-street, and 19 Clinton-street, Boston. They are also for sale at COMSTOCK & Co.'s Agricultural Warehouse, Albany. Sept. 1—3t

FINE WOOLED BUCKS FOR SALE.

SEVERAL Bucks, of various ages, and of the best quality, both for fineness and weight of fleece, as well as for shape and constitution, can be had if applied for soon. A part of them are *pure* Merino, and a part a cross of the Merino and Saxon. Address, *post paid*,

SANFORD HOWARD,
Albany, Oct. 1. Office of the Cultivator

CONTENTS OF THIS NUMBER.

CORRESPONDENCE.

Letters from Mr. NORTON—Culture and use of the Potato, ... 329
Letters from Mr. MITCHELL—Trip from Paris to Geneva, ... 330
Application of Manure, by BERKSHIRE—Guano for Roses and Grape Vines, by A. T, ... 331
Letter from ALEX. M'DONALD—Van Antwerp's Churn Dash, by A SUBSCRIBER—Wheat Culture in Connecticut, by C. ALLEN, ... 332
Rules for Plowing, by J. M'CONNELL—The Strawberry, by J. F.—To Destroy the Red Ant, by C. C. G. 333
Notes of Travel in the Southwest, by SOLON ROBINSON. 334
Virginia Lands, by ZA. DRUMMOND, ... 335
Remedy for "the Hooks," by C. H. TOMLINSON—Scab in Sheep, by GRAZIER, ... 336
Plan of a Stable and Carriage House, by YARROW—Construction of Ice Houses, by FARMER C.—Bog Cutter, by S. CAMP—Remarkable Calf, by an AMATEUR—Apples for Swine, by H. GOODHUE, ... 337
Cement Water Pipes, by W. F. GUERNSEY—The Pumpkin, by C. FOX—First Importation of Merino Sheep, by S. W. JEWETT, ... 338
Hot Air Furnaces, by W. R. SMITH—Botanical Tour, by S. B. BUCKLEY—Inquiries, by various persons—Curing Meat, by P. ELITHARP 339
The Pear, by S. WORDEN—Wharf Rats, by G. E. J.—Experiments with Guano, by R. PARNELL—N Y. State Ag. Society—Important Decision, ... 340

EDITORIAL.

To Correspondents—Albany Ag. Warehouse—Acknowledgments, ... 344
Monthly Notices, ... 345
Foreign Intelligence—Show of the American Institute, ... 346
Mr. Colman's European Agriculture—Part VI., ... 341
The Crops. &c —Rensselaer Institute. 342
Facts and opinions, condensed from Exchange Paperrs. 343
Downing's Fruit and Fruit Trees of America, ... 347
Farm of J. F. Sheafe, Esq —Bone Manure—Birds vs. Insects, 348
Live Stock in Connecticut, ... 349
Remedy for Cows Sucking themselves—Fattening Animals, ... 350
The Potato Disease, ... 351
Origin of the Morgan Horse, ... 352
Electricity on Vegetation—Curing Hams, ... 353
Hedges for the United States, ... 354
Hanging Gates—Agricultural Exhibitions, ... 355
Importation of Cattle—Chinese Geese, ... 357

ILLUSTRATIONS.

Fig. 94—Stable and Carriage House, ... 337
Fig. 95—Bog Cutter, ... 337
Fig. 96—Holderness Bull, ... 349
Eig. 97—Yoke for Cows, ... 350
Figs. 90 to 101—Hanging Gates, ... 565
Fig. 102—The China Goose, ... 357

☞ ADVERTISEMENTS inserted in the Cultivator, at $1,00 per 100 words for each insertion.

ONION SEED.—1000 lbs. of Blood Red Onion Seed.
150 " Pure White " "
500 " Yellow " "

all the growth of the present season and raised from selected roots. For sale at the Seed Store of the Hartford Co. Ag. So., by
Hartford, Ct., Oct. 10, 1845.—3t E. W. BULL, Seedsman.

GARDEN SEEDS.

THE subscriber (who has been for years the most extensive practical seedsman in America,) would inform dealers in seeds, that his crops are now nearly all harvested, and that orders can be speedily executed. The application of horse power to threshing and cleaning, (heretofore more expensively performed by hand,) has enabled him to reduce prices below those of former years; and as the seeds sold by the subscriber, are, (with slight exception,) the produce of grounds cultivated under his strict personal inspection, his customers have a guaranty which cannot be given with imported seeds, or such as are casually purchased, and vended in ignorance of their worth, *neither texture nor complexion being an index of their age or quality.* D. LANDRETH, Philadelphia.
Nov. 1—1t.

D. LANDRETH & FULTON, Proprietors of the old and widely known Nursery and Gardens of the late D. & C. Landreth, near Philadelphia, offer for sale a select, well grown stock of most articles in their line—embracing Fruit Trees of choice kinds, deciduous and evergreen Ornamental Trees. Flowering Shrubs of rare varieties, and Green House Plants, including two thousand finely formed, and many thousand small plants of the Camellia. To preserve the character of this establishment, as it existed under the old proprietors, has been the aim of their successors, and they trust successfully so.

On hand 50,000 Maclura, or Osage Orange, better adapted for HEDGES than the thorn, either native or exotic. It is perfectly hardy, (farther north than at Philadelphia,) grows with rapidity and is free from disease and the attack of insects. On good land and with proper culture, it will form a hedge impenetrable to man or beast, in five years.

Printed Catalogues, on application.
Nov 1—1 t.

ALBANY AGRICULTURAL WAREHOUSE.

No. 23 Dean-street.

THE subscribers have taken the large store, No. 23 Dean-street, Albany, where they have opened an Agricultural Warehouse, for the sale of all such Machines, Implements, Tools, and Seeds as are required by Farmers and Gardeners. It is their intention to be prepared at an early day to supply every article for which there shall be a demand, and they beg to assure the public that no effort will be spared to procure the best quality of articles, and to manage the business, so far as possible, to the satisfaction of those who may deal with them.

PLOWS.—They have been appointed the Agents of the manufacturers of the celebrated *Centre Draft, Worcester,* and *Diamond* Plows, and will keep constantly on hand an assortment of the different sizes of these different kinds, together with the Subsoil Plows, of Ruggles, Nourse & Mason, and Prouty & Co. Also Barnaby & Mooer's Side-Hill Plows, and Wiard's Gang Plows.

STRAW CUTTERS.—The different sizes of Hovey's and Stevens', at prices from $10 to $25.

HORSE POWERS AND THRESHING MACHINES.—Having been appointed agents for the sale of Warren's Improved Horse-power and Threshers, orders will be received for them, and the machines shipped from New-York at the manufacturer's prices. They are also agents for Burrall's Power and Thresher, made at Geneva. Arrangements will be made as soon as possible to supply all the best kinds of Horse-powers manufactured in different parts of the country.

They will keep on hand at all times,

Corn Shellers, Fanning Mills,	Root Cutters, Cultivators,
Shovels, Spades,	Road scrapers, Wheel barrows,
Hay and Manure Forks.	Cheese Hoops and Tubs,
Hay Knives, Hoes, Scoop Shovels,	Measures of all sizes,
Bull Rings, Tie-up-Chains,	Spinning Wheels, Reels,
Churns and Cheese Presses,	Pails, Butter Ladles, &c., &c.

FIELD SEEDS.—They will be prepared to supply orders for all kinds of Field Seeds—such as the best varieties of

Spring and Winter Wheat,	Clover and Grass Seeds,
Rye, Oats, and Barley,	Turneps, Ruta Bagas,
Peas and Beans,	Beets and Carrots,

Potatoes of different kinds.

GARDEN SEEDS.—A complete and general assortment from the best growers at home and abroad.

IMPROVED STOCK.—Orders will be received for the different breeds of Improved Cattle, Sheep, Swine, Poultry. &c., and the selections made by a gentleman of extensive practical knowledge in these matters.

The business will be conducted under the firm of E. COMSTOCK & Co, to whom all orders should be addressed.

LUTHER TUCKER,
Albany. Oct. 20, 1845. ELON COMSTOCK.

NURSERY AT MACEDON.

THE subscriber, besides his half of the stock, grounds, &c., of the former nursery of Thomas & Smith, having made large additions, has already, of moderate size, a fine assortmem of cherry, peach, apricot, nectarine, and some other trees, for sale at moderate prices.

No trees are ever sold by him, but those propagated from *bearing trees*, whose *excellent qualities* and *fitness for the climate* have been THOROUGHLY PROVED, and in nearly all cases by many years experience.

His collection of bearing trees, in connection with the fine and extensive assortment of David Thomas, of Cayuga county, consists of several hundred varieties in a bearing state, from which the very best only are selected.

Orders promptly supplied, and trees, well packed, sent by canal or railroad. If deficiencies in supplying parts of orders occur, the balance of remittances is returned at once to the purchaser.

Address, J. J. THOMAS,
Nov. 1—1t. Macedon, Wayne Co., N. Y.

CAUTION.

THE undersigned has been duly informed that in consequence of *the principle of the* "Warren Patent Horse Power and Thresher" being now so universally conceded superior to all others, there are persons in various places who are taking or about to take the risk of manufacturing an article to imitate them Now this is to give notice *that the genuine and latest* "Warren Improved Patent Horse Power and Thresher" *can only be obtained of the subscriber,* or of his agents, E. COMSTOCK & Co., at the *Albany Agricultural Warehouse,* and whosoever else presumes to make and sell them, incurs the liability of legal ptoceedings.

The undersigned wishes it distinctly understood that the *genuine machines must not be held responsible for the probable failures of the imitation article.* J. PLANT, 5 Burling Slip, N. Y. city,
Successors to L. Bostwick & Co., and exclusive agent for the above machines. Nov. 1.

THRESHERS AND HORSE POWERS.

THE undersigned having been successfully engaged in the particular manufacture and sale of the "Warren Improved Patent Horse Power and Thresher" for the last three years, is now completing arrangements to sell various other kinds of approved Powers and Spike Threshers. Among them may be obtained Trimble's. It is the intention of the subscriber to keep an assortment of the best Horse Powers and Threshers, which can be had at reasonable prices. J. PLANT, 5 Burling Slip.
New-York Nov 1.